

May 2025. Technology snapshot

Digital health in Catalonia

Digital health in Catalonia. Technology snapshot

ACCIÓ
Government of Catalonia



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Carried out by

Strategy and Competitive Intelligence Unit of ACCIÓ

Collaboration

Barcelona Health Hub

Biocat

Agència de Qualitat i Avaluació Sanitàries de Catalunya

Fundació TIC Salut i Social



Agència de Qualitat i Avaluació
Sanitàries de Catalunya



Barcelona, May 2025



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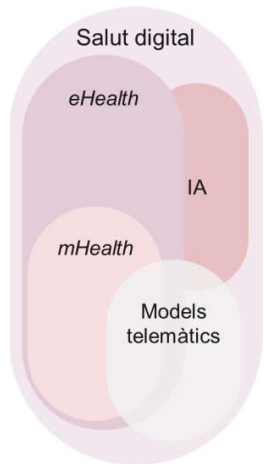
Executive summary

1. Definition, importance and applications of digital health
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Executive summary of digital health worldwide

Digital health is the field of knowledge and practice associated with the development and use of digital technologies to improve health.

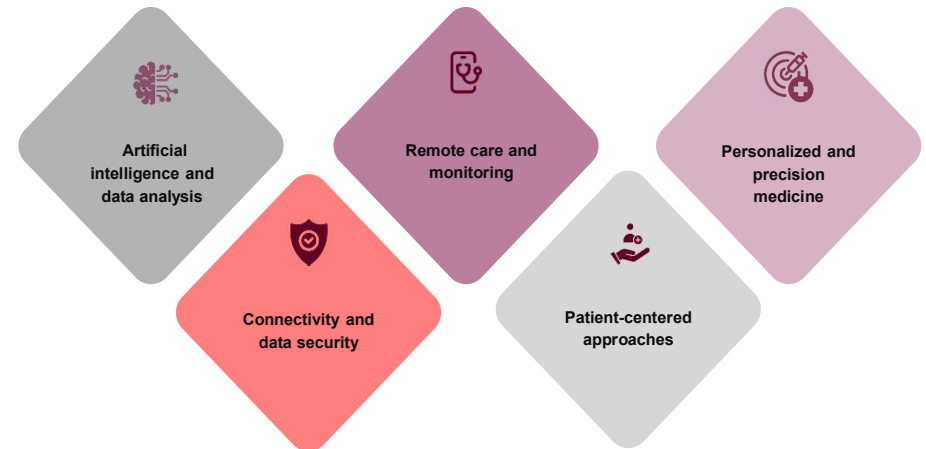
Fields of digital health



Technological solutions

- Digital therapies
- mHealth
- ICT applied to health
- Personalized medicine
- Telemedicine
- Devices, sensors and wearables

Digital health trends



Global market

The global digital health market is expected to reach \$258.3 billion in 2029, with a 6.9% annual growth until 2029.

The United States leads the world in turnover, ahead of China and Japan. 5 European countries are in the top 15.

Technological FDI in the health sector amounts to an investment of more than 24.5 billion euros and more than 77,000 new jobs have been created during the last five years.

Digital health startups have attracted more than 75 billion dollars in venture capital in the last 5 years; 45% of this capital is allocated to startups specializing in AI applied to health.

Executive summary of digital health in Catalonia

386 companies in the digital health ecosystem

16.6% more companies compared with 2024 and 44.6% with respect to 2022.

Turnover of €633 M (+6.9%) and 5,302 jobs (+10.2%).

92.5% are SMEs and 55.7% are startups.

Prominent among them are companies that develop **clinical tools** (17.9%) and **digital therapies** (13.0%).



160 companies (41.5%) develop AI tools



23 companies (6.0%) develop immersive technologies



12 companies (3.1%) develop medical robotics



Leading agents and initiatives

27 research centers and hospital research institutes

14 universities and education and training establishments

10 acceleration programs

15 associations, networks, and clusters

10 institutions and the Public Administration

11 key public initiatives

24 companies specialize in *femtech*

25 companies specialize in *agetech*

31 companies specializing in *pediatech*



Attractive for international companies

2nd-ranked region in the world for attracting foreign technological investment projects in digital health over the last five years.

16 technological hubs of companies such as AstraZeneca, Bayer, Novartis, Roche and Sanofi.



Entrepreneurial ecosystem

The health technology sector:

- ranks second in terms of the number of startups, with 369 startups accounting for 16.1% of the total.
- attracts €177.7 million in venture capital investment, 43% more than in 2023, and ranks among the first with 14.9%.

Barcelona is the 5th-ranked European city in closed venture capital rounds for digital health startups.

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Digital health in Catalonia

1. Definition, importance and applications of digital health

Digital health: plurality of definitions



The **World Health Organization** defines digital health as:

“The field of knowledge and practice associated with the development and use of digital technologies to improve health”



According to the **European Commission**, digital health is:

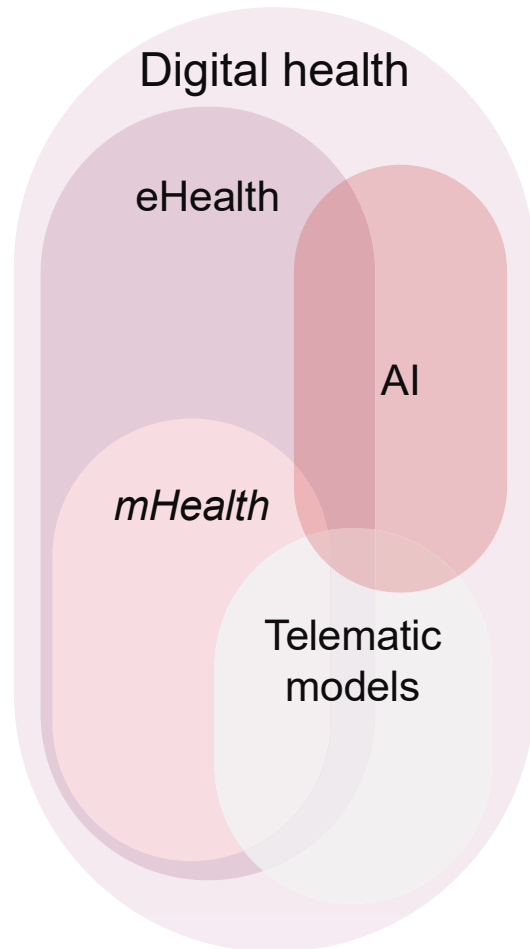
“The tools and services that use ICT to improve the prevention, diagnosis, treatment, monitoring and management of diseases and health conditions and monitor and manage lifestyle habits with an impact on people’s health”



Sources: European Commission, World Health Organization

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Digital health concepts



eHealth is the use of information and communication technologies to provide healthcare services and use health data for prevention, diagnosis and therapeutic treatment.

mHealth is the use of mobile devices such as smartphones, smartwatches, monitoring devices, voice assistants, apps, platforms, chatbots, etc. to support medical and public health practice.

Telematics models are the set of practices and services that enable telematic healthcare for patients, the completion of bureaucratic healthcare procedures, the exchange of information between healthcare professionals and between healthcare professionals and patients, and the exchange of experiences and the exploitation of data for research.

The applications of *artificial intelligence* in the health sector encompass very diverse areas, from the automated interpretation of imaging tests, to the monitoring and interpretation of patient records, identification of drug interactions, epidemiological surveillance, etc. AI has great potential to improve people's health.

Technological solutions

Technology can help health in many different ways



Digital therapies

Diabetes apps that reduce risk events

Mental health solutions that reduce symptoms of depression



mHealth

Nutrition and diet apps

Medication adherence apps

Access to health information



ICT applied to health

IT apps

Electronic health histories

Electronic prescriptions



Personalized medicine

High-precision tests

Clinical decision support



Devices, sensors and wearables

Biometric sensors

Diagnostic products



Telemedicine

Telematic visits

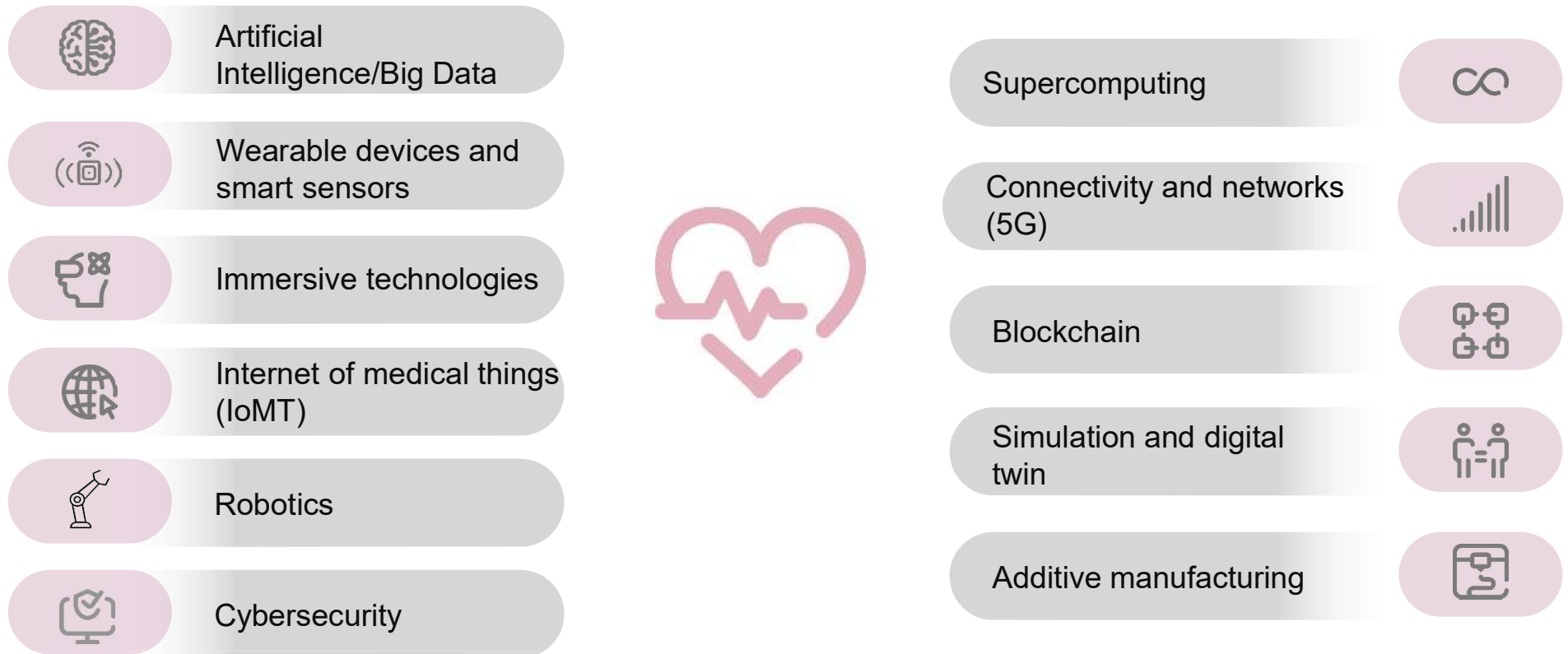
Patient monitoring

Remote health programs

Sources: Techtargt, European Commission and Digital Therapeutics Alliance

Convergence with other technologies

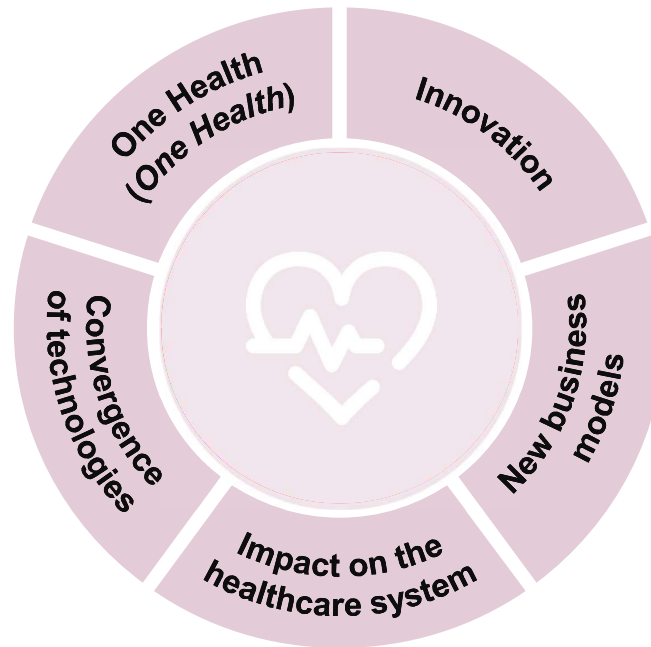
The transformation of the health sector is due to the constant incorporation of disruptive innovations and hybridization with new technologies



Importance of digital health

The use of technologies in health can lead to a practical approach to the One Health concept, based on the idea that human, animal and planetary health are inter-dependent. The nature of digital health can help promote a practice under this concept in a multisectoral, cross-disciplinary and, above all, digitally inter-connected manner.

Digital health in itself takes a comprehensive and hybrid approach that brings together a wide range of different key technologies, such as the use of big data, robotics, genomics, cybersecurity and wearables, which can lead to high added value and reduced healthcare costs in terms of prediction, forecasting and quality improvement.



Digital applications and technologies in the field of health are experiencing healthy growth in view of the rise in new and serious social-health and biological threats and those linked to climate change. Healthcare supported by ICT can offer new pioneering methodologies and uses in order to establish a comprehensive approach to health (always based on previous research work).

The use of digital technologies in health gives rise to new businesses and business models that can ultimately attract new market sectors. A major challenge is to secure new economically sustainable strategies, health platforms and ecosystems, the role of insurance and new public-private partnerships.

Digital health can shorten and alleviate the response capacity of healthcare systems while promoting optimal care with speed and efficiency. With the aim of preventing work overloads, the use of digital technologies in health also proposes a human-centered approach that seeks improvements in terms of quality.

Digital health in Catalonia

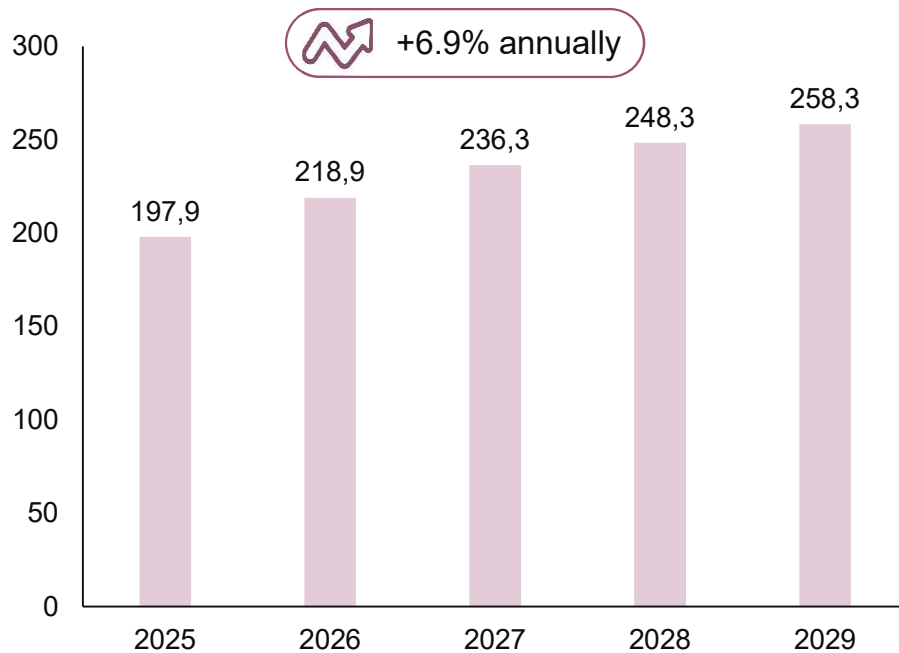
2. World digital health market

Size of the global digital health market

The global digital health market surpassed \$171.8 billion in 2024 and is expected to reach around \$258.3 billion in 2029, with a 6.9% annual growth between 2025 and 2029.

World digital health turnover

(2025-2029, in billions of dollars)



Key factors driving the growth of the digital health market

- Adoption of new technologies applied to health
- Increase in public spending on health and general aging of the population

Main challenges of the digital health market

- Large digitized personal patient databases and how to protect them
- Renewal of obsolete analog healthcare systems that become personalized

Sources: Statista and Precedence Research

World digital health market, by countries

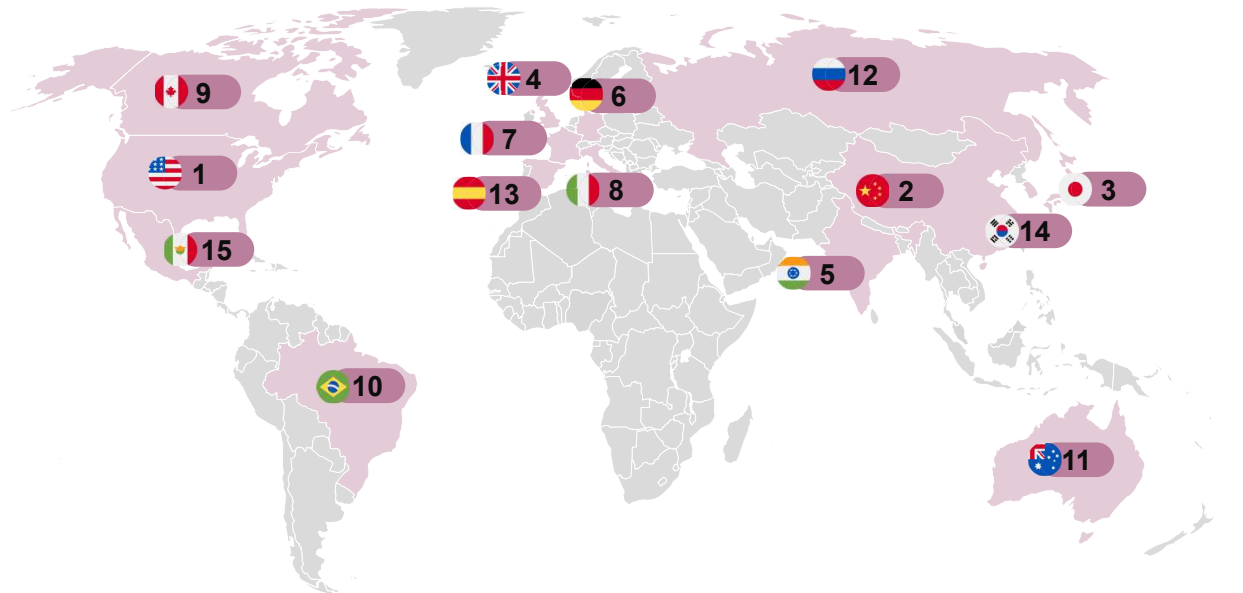
The **United States** leads the world in digital health turnover



China ranks second in terms of turnover, and in third place, and far behind, is Japan




Five European countries stand out in the top 15: **the United Kingdom, Germany, France, Italy and Spain**



	Countries	Turnover (M\$, 2024)	% growth year on year (2024-2029)
1	United States	47,120	8.2%
2	China	38,200	7.2%
3	Japan	8,285	8.8%
4	United Kingdom	5,545	9.1%
5	India	5,337	13.1%
6	Germany	4,858	8.1%
7	France	4,085	8.1%
8	Italy	4,021	10.0%
9	Canada	3,514	8.0%
10	Brazil	3,171	9.3%
11	Australia	2,670	8.4%
12	Russia	2,603	9.4%
13	Spain	2,515	10.1%
14	South Korea	2,460	3.5%
15	Mexico	2,412	8.9%

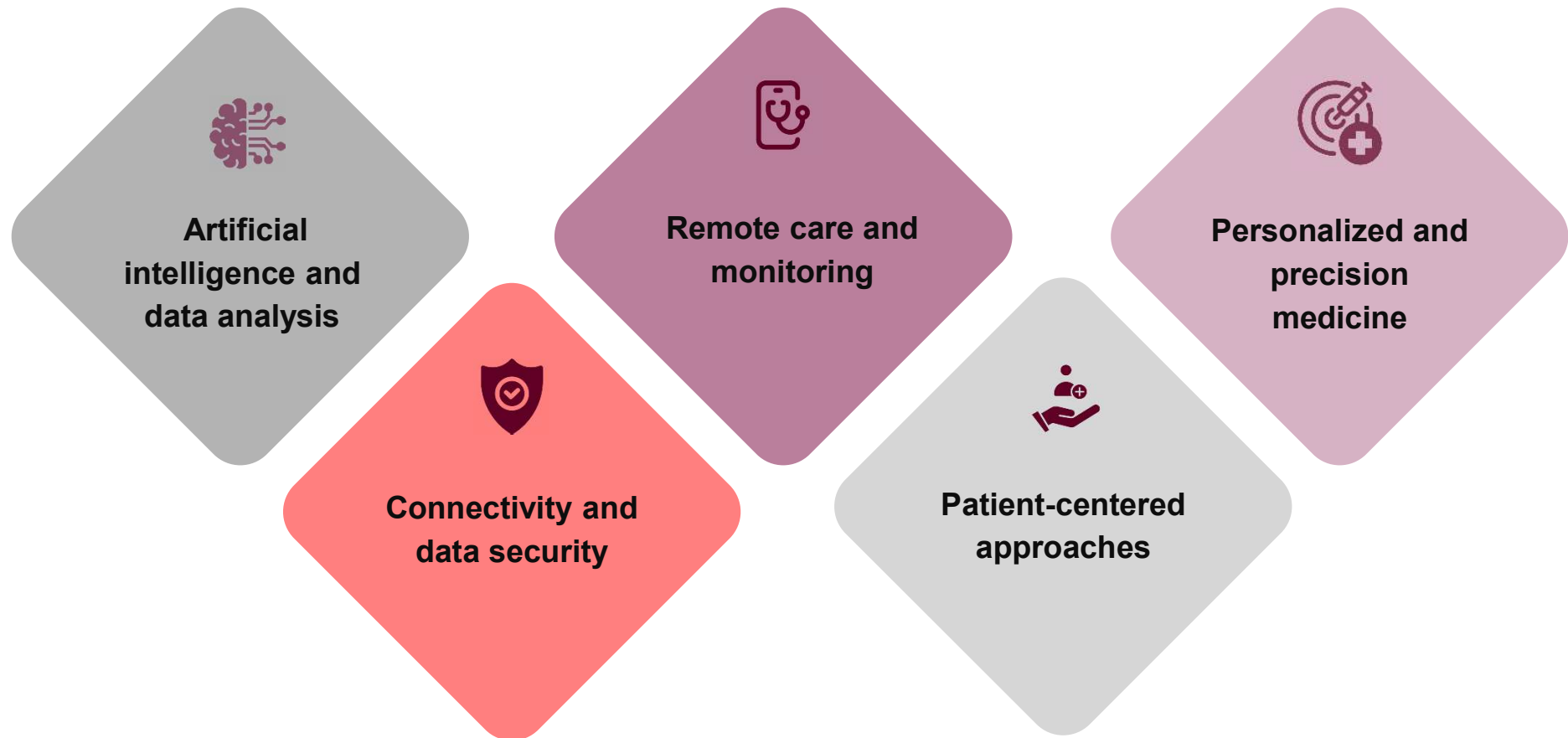
Global leading companies in digital health investment



 With presence in Catalonia

Digital health in Catalonia

3. Trends, opportunities and challenges of digital health



Opportunities and challenges stemming from digital health

Opportunities



Better access to medical care



Patient participation



Improved efficiency and cost reduction



Personalized medicine



Research and innovation

Challenges



Data privacy and security



Talent



Accessibility and equity



Interoperability and integration into existing health systems



Legal and regulatory framework. Evidence and clinical validation

Digital health in Catalonia

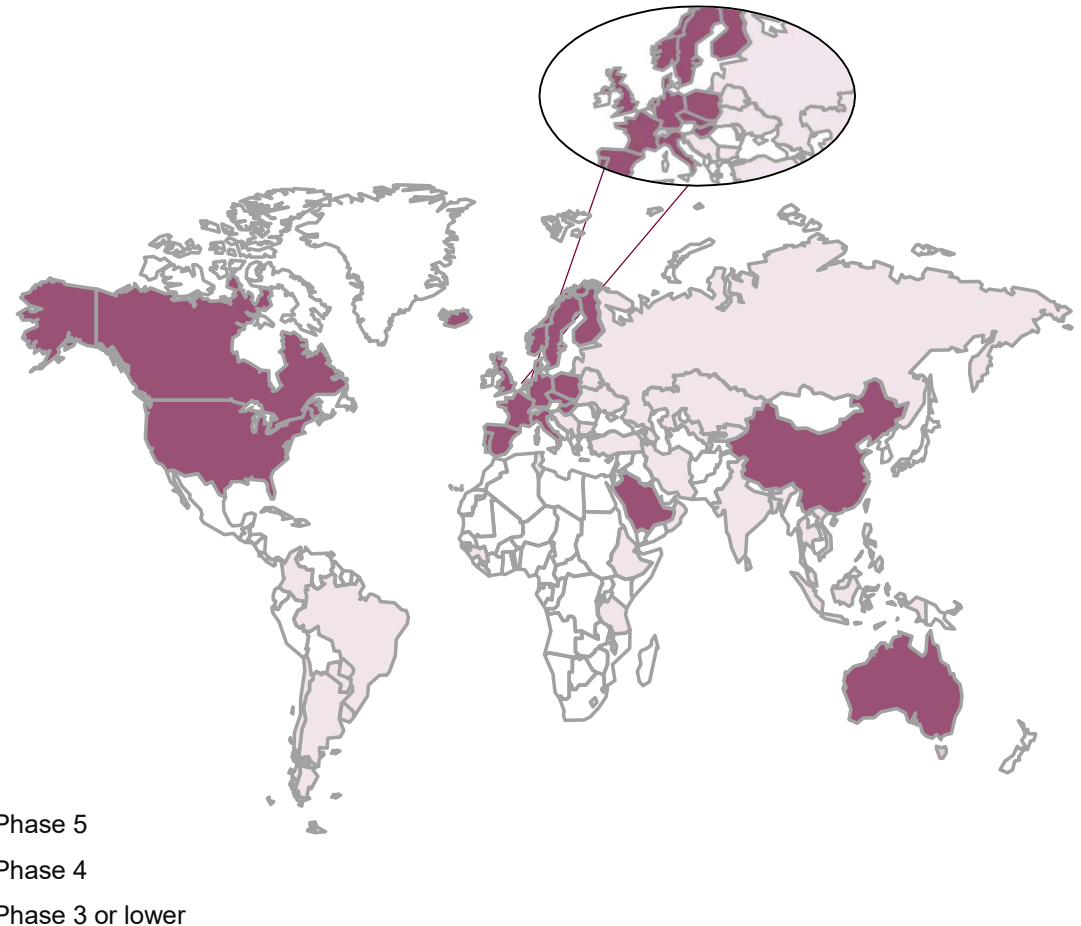
4. Initiatives related to digital health

International initiatives

Digital health is on the agenda of the main medical organizations

Europe, and North America continue to be the global regions with a **global digital health index (GDHI)** highest taking into account its indicators: governance, strategy and investment, policies and compliance, workforce, interoperability, infrastructure and services and applications.

- Europe and North America continue to lead innovation in digital health. Finland has established itself as the epicenter of digital health in Europe.
- In the Pacific, in Australia, the Government has recently announced a major investment in digital mental health projects.
- Meanwhile, in Africa, Nigeria is working on improving health infrastructure with increased investment in the private sector.
- According to the World Health Organization, optimal implementation of digital health interventions on a global scale could save more than 2.1 million additional lives until 2033, along with a gain of 4.9 million years of life for the world population over a 10-year horizon.



- Phase 5
- Phase 4
- Phase 3 or lower

Sources: Digital Health Index, OMS, Healthcare in Europe
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Initiatives in the European Union

The **digitalization of health systems** is a key point for the digital transition of the economy and society in the EU.

The **Communication of the Commission on enabling the digital transformation of health and care in the digital single market (April 2018)** set the theoretical precedent for technologically responding to the challenges of an aging population, chronic illnesses, unequal access to healthcare and the education and training of health professionals. In it, the following goals are set:



Secure access to and exchanges of health data

Personalized medicine through a European data infrastructure for research

Training for citizens in digital tools and data for person-centered healthcare

European Health Union

The current project of the European Health Union is included in the goal of **improving protection, prevention, preparation and the response to threats to human health in the EU**. A **digital health barometer** was published in 2022 in order to monitor the development and appeal of the sector, within the **EU global health strategy** published by the Commission. This will guide the EU's action in the field of global health until 2030 and establishes clear action priorities, guiding principles and operational action lines. It will also create a new monitoring framework to assess the effectiveness and impact of the EU's policies and funding. The use of technologies is envisaged in **current initiatives** such as the following:



European Health Emergency Preparedness and Response Authority (HERA). Medical counter-measures for health crises.



European plan for the fight against cancer. Prevention, detection and patients' quality of life.



Pharmaceutical strategy. Access to medicines and medical needs which are not covered.



Global mental health approach. To put mental health on a par with physical health.



Critical Medicines Act. Improve the availability, supply and production of critical medicines in the EU.

Spain's National Digital Health Strategy



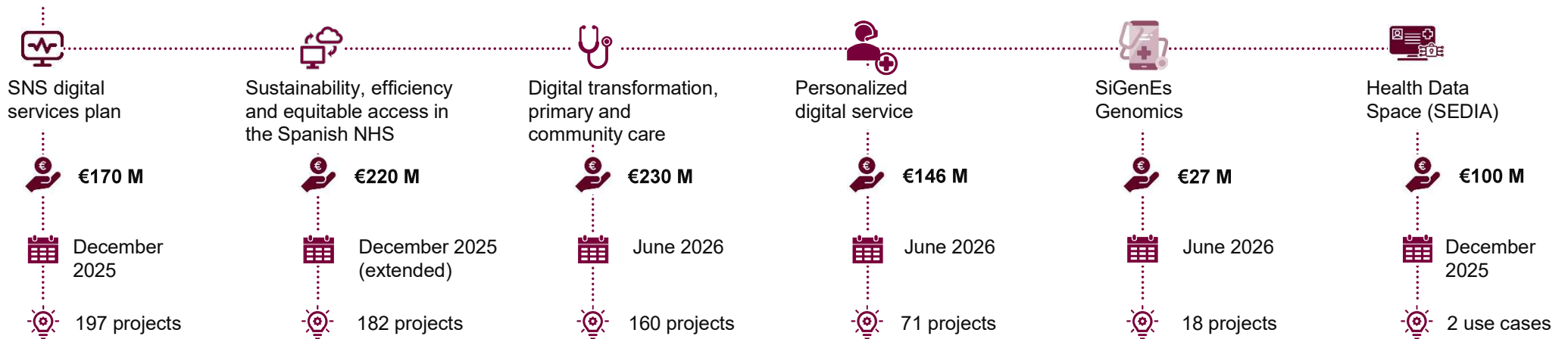
The **Spanish Digital Health Strategy 2021-2026** is part of the Spanish Government's roadmap "Digital Spain 2026" and proposes the digital transformation of the National Health System (SNS) services in three main areas of action: the development of **digital smart services**, the **interoperability** of health information and the promotion of **data analytics**.

3 Strategic goals

1. Strengthening of the National Health System centers
2. Digitization and modernization of industrial capacity
3. Collaboration between scientific and business fabrics

6 Action plans currently being driven*

€893 M



Digital health in Catalonia

5. Digital health in Catalonia

Corporate mapping of digital health in Catalonia (I)

386 companies

+16.6%¹

633 million euros

+6.9%¹

5,302 jobs

+10.2%¹

-  92.5% are SMEs.
-  26.9% have a turnover of more than one million euros and 3.1% more than 10 million euros.
-  63.0% have existed for less than 10 years.
-  55.7% are startups.
-  15.5% are exporters.
-  13.0% are subsidiaries of foreign firms.

Key figures by **business segment**:

Clinical tools **17.9%**

Digital therapies **13.0%**

Diagnoses **9.8%**



160 companies (41.5%) develop **artificial intelligence** solutions applied to health

¹ growth in comparison to mapping data drawn up in 2024.

Note: the data refer to 2025; the turnover and number of employees data, to 2023 (or latest available).

Corporate mapping of digital health in Catalonia (II)

R&D

Genomics

Medical robotics

Diagnoses

Medical decision support

Clinical tools

Technological consultants

Digital therapies

Simulation and training

Health services

Apps and marketplaces

Logistics and others

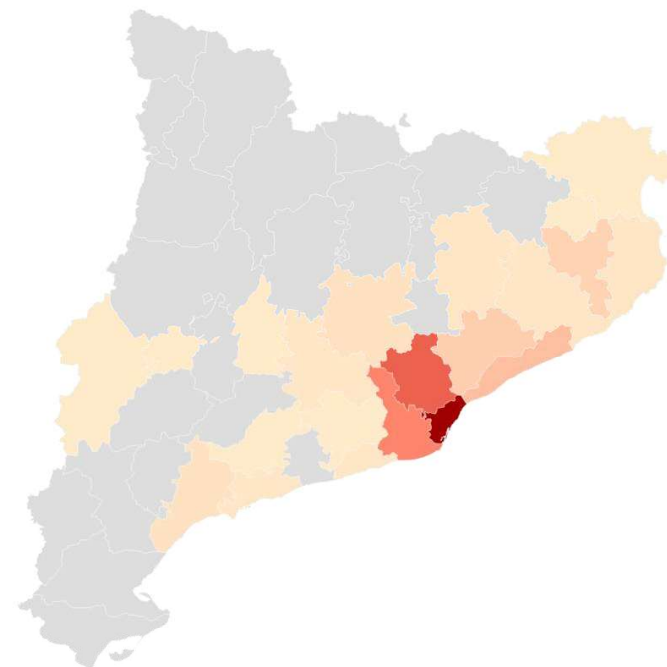
Location of Catalan digital health companies

81.1% of digital health companies in Catalonia are located in the Metropolitan Area of Barcelona (AMB, in its initials in Catalan).

By cities, the following stand out: **Barcelona** (255), **Sant Cugat del Vallès** (18), **Girona** (7), and **Badalona**, **Cornellà de Llobregat**, **Esplugues de Llobregat**, **Mataró**, **Sabadell** and **Terrassa** (5).






County	No. of companies	% of the total
Barcelonès	263	68.1%
Vallès Occidental	38	9.8%
Baix Llobregat	26	6.7%
Maresme	14	3.6%
Vallès Oriental	9	2.3%
Gironès	8	2.1%
Others	28	7.3%
Total	386	100%

Distribution of digital health companies by counties



Note: the Metropolitan Area of Barcelona includes 36 municipalities in the counties of El Barcelonès, El Baix Llobregat, El Vallès Occidental and El Maresme.

Agents of the digital health ecosystem in Catalonia

-  Research and technological centers and hospital research institutes
-  Universities and training centers
-  Acceleration programs and incubators
-  Associations, networks and clusters
-  Institutions and Public administration



The grid contains logos for the following categories:

- Research and technological centers and hospital research institutes:** barcelonaβeta, IBEC, IRB/eida, ISGlobal, LabORA, LEITAT, Parc Tauli, SJD, CVC, eurecat, Hospital del Mar, i2cat, IRB, Vall d'Hebron, IDIBAPS, IDIBELL, IDIBGI, IGTP, CSIC, IISPV, Institut Guttmann, eHealth Center, Uoc, Institut de Recerca Biomèdica.
- Universities and training centers:** UAB, Universitat de Barcelona, UPC, upf., Universitat Pompeu Fabra, Universitat de Girona, UIC, laSalle, Universitat de Lleida, UOC, Universitat Oberta de Catalunya, Barcelona Digital Talent, Universitat Ramon Llull, laSalle, Universitat Rovira i Virgili, UVIC, Universitat de Vic, BTS | Barcelona Technology School.
- Acceleration programs and incubators:** cimti, CRAASH BARCELONA, d-HEALTH BARCELONA, The Collider, Ship2B Foundation, StartHealth, IAM3DHUB, WAYRA, Healthcare Living Lab Catalonia, think in 3D.
- Associations, networks and clusters:** Beauty Cluster, BARCELONA HEALTH HUB, BIB, BIOINFORMATICS BARCELONA, BIST, Catalonia Institute of Science and Technology, Catalonia.health, Clúster Digital, Digital Health Connector, INDESCAT, iSYS, Tech Barcelona, WE MIND Cluster, XARTEC SALUT, XARXA TECSAM, 4DHealth.
- Institutions and Public administration:** ACCIÓ, Generalitat de Catalunya, Salut/, Agència de Qualitat i Avaluació Sanitàries de Catalunya, biocat, eit Health, tecnio, Barcelona Activa, Generalitat de Catalunya Departament de Salut, CatSalut, Generalitat de Catalunya Fundació TIC Salut i Social, DSC, Consorci de Salut i Social de Catalunya, CERCA.

Talent in Catalonia

Catalonia has universities that teach bachelor's, master's and postgraduate degree programs that offer knowledge applicable to digital health

Bachelor's Degrees

- Bioengineering
- Biomedical Engineering
- Bioinformatics
- Computer Engineering
- Biotechnology
- Health Engineering
- Human Biology
- Artificial Intelligence
- Applied Data Science
- Software Application Techniques
- Data Science and Engineering

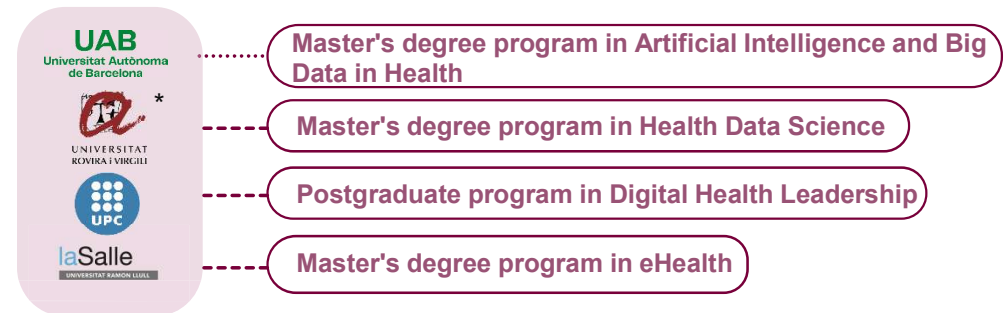
Master's degrees

- Omics Data Analysis
- Automation and Robotics
- Bioengineering
- Bioinformatics
- Bioinformatics and Biostatistics
- Bioinformatics for Health Sciences
- Advanced Biotechnology
- Biomedical Data Science
- Medical Image Computing
- Cybersecurity
- Biomedical Engineering
- Computational Biomedical Engineering
- Big Data Engineering
- Computer Engineering
- Fundamentals of Data Science

Catalan universities that provide education and training in digital health



Specialized courses of study in digital health



* inter-university master's degree program led by the URV

Digital health initiatives in Catalonia

SISCAT Information Systems Master Plan

This identifies, approves and executes the opportunities to improve care by means of the application of ICT

My Health

A personal digital health space that makes it easier for users to view their medical history

Health service integrator iS3

An interoperability technological platform for the management of care processes

Access to innovation program in the Catalan health system (PASS)

Initiative to transform the way innovations and technologies reach the Catalan healthcare system

Shared clinical history

A tool that groups together documents containing data and information on a person's status throughout their care process

Health/AI program

A person-centered program for the promotion and development of AI in the Health System

Center for clinical validation of digital solutions

It supports the co-design, testing and validation of innovative healthcare technologies in hospital settings

Comprehensive cybersecurity model for the healthcare sector

Tool to promote cybersecurity and reduce exposure to current cyberthreats in the healthcare environment

Electronic prescriptions

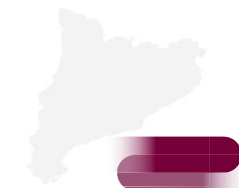
A tool that enables the integrated management of pharmaceutical services

Public procurement of innovation

A public procurement instrument that promotes innovation as a key instrument

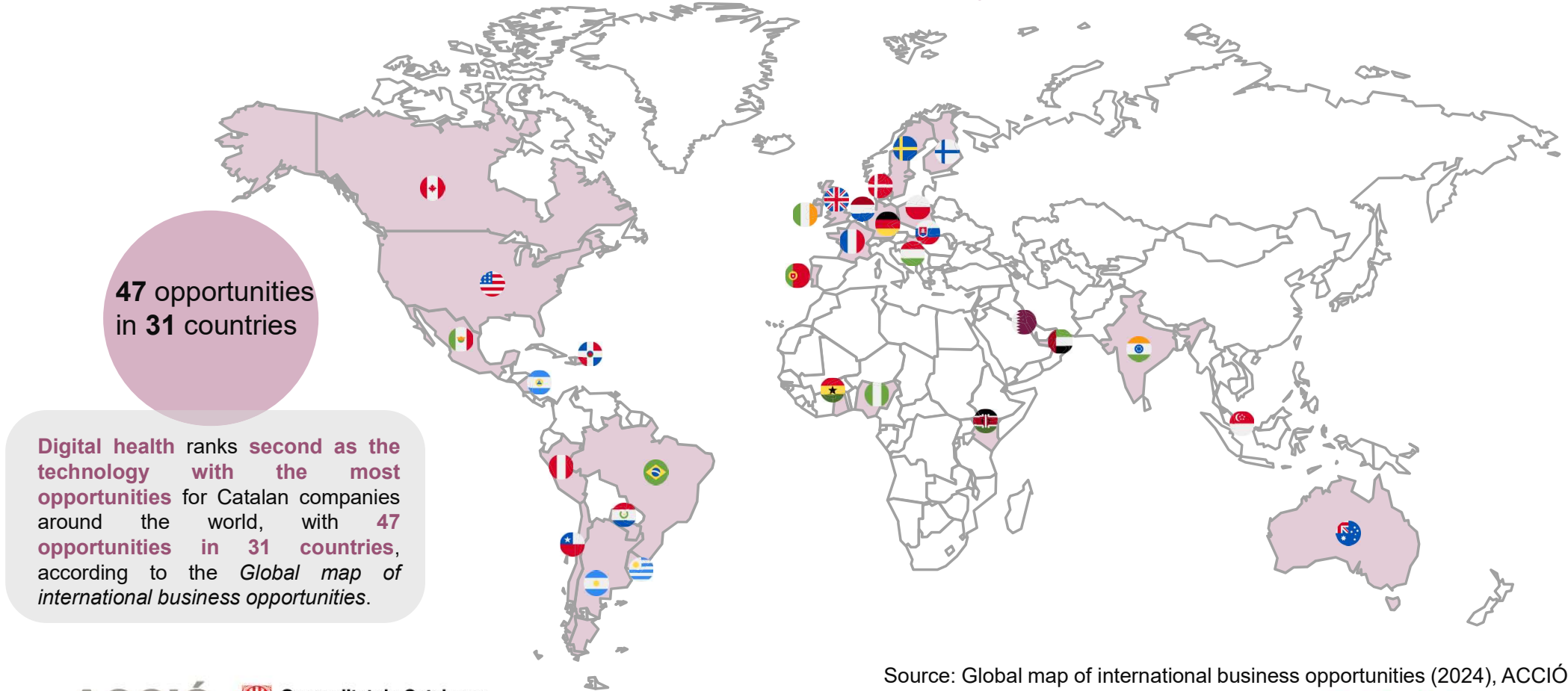
Capture and integration of clinical images

A service aimed at healthcare professionals that enables them to add clinical photographs to their patients' clinical histories



International business opportunities in digital health

Main markets with business opportunities for Catalan companies identified by ACCIÓ:



47 opportunities in 31 countries

Digital health ranks second as the technology with the most opportunities for Catalan companies around the world, with 47 opportunities in 31 countries, according to the *Global map of international business opportunities*.

Source: Global map of international business opportunities (2024), ACCIÓ

SWOT of digital health in Catalonia

Strengths



Strong business fabric



Pioneering health system and ecosystem



Global benchmark research and hospital system



Highly dynamic, varied and expanding network of startups

Opportunities



Leadership in initiatives and projects



Adoption of locally developed technologies



Improvements in the health system. Public procurement of innovation.



Creation and development of solutions for different challenges and therapeutic areas.

Weaknesses



Network of small-scale technology providers



Human factor: need for different profiles



Validation models



Interoperability

Threats



Resistance to change



Lack of training in technological knowledge



Lack of significant technological investment



Emergence of major technological and pharmaceutical firms in the world of health

Digital health in Catalonia

6. Digital health technological ecosystem in Catalonia

Catalan companies use the latest technological innovations

33



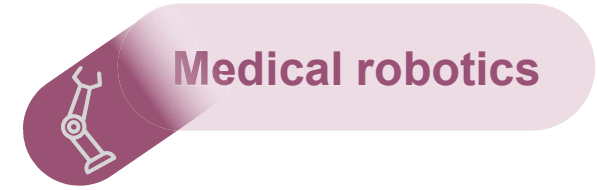
**Artificial
intelligence**

| 160 companies
(41.5%)



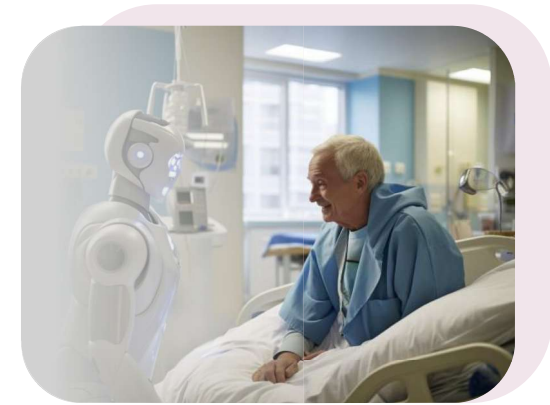
**Immersive
technologies**

| 23 companies
(6.0%)



Medical robotics

| 12 companies
(3.1%)



Catalan companies incorporate the latest technological innovations: artificial intelligence

Artificial intelligence

160 companies, 41.5% of all digital health companies



Artificial intelligence is transforming health, turning data into accurate diagnoses, algorithms into personalized treatments and technology into more agile processes, with Catalan companies leading this revolution.

Main applications:

- Clinical tools**: doctomatic, emily.ai, HumanITcare, IOMED, QMENTA
- Diagnoses**: aims medical, mediktork, The Blue Box, timeisbrain, xAID
- Medical decision support**: ADAS 3D, amalfi analytics, INBRAIN NEUROELECTRONICS, Predictheon, SYCAI MEDICAL
- Digital therapies**: DyCare, improfit, MAXSENS, Surgifit, XRHealth
- R&D**: abzu, acellera, nostrum biodiscovery, oloBion, Starlab
- Technological consultants**: DRIBIA, Enaltis, omi360, PickleTech, Vincer.ai

Note: partial illustrative image.

Catalan companies use the latest technological innovations: immersive technologies

35



Immersive technologies

| 23 companies, 6.0% of all digital health companies



Note: partial illustrative image.

Immersive technologies such as virtual reality and augmented reality improve treatments, rehabilitation and education and training. In Catalonia, innovative companies are promoting pioneering solutions that are transforming medical care.

Main applications:

Digital therapies



Simulation and training



Catalan companies use the latest technological innovations: medical robotics

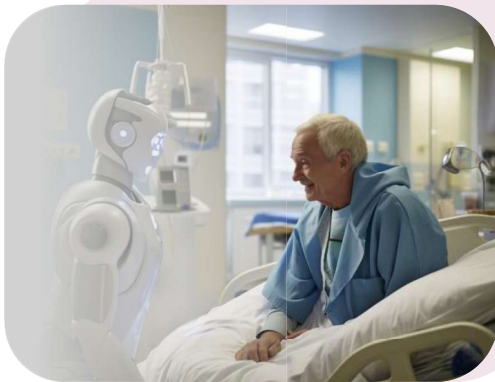
36

Medical robotics



Medical robotics is revolutionizing surgeries and patient care, with high-precision surgical robots, care robots and exoskeletons, with Catalan companies developing cutting-edge solutions.

| 12 companies, 3.1% of all digital health companies



Catalan companies respond to the needs of different population profiles

Femtech

| 24 companies



#ReproductiveHealth
#PelvicFloor
#BreastCancer



Agetech

| 25 companies



#NursingCare
#ActiveAging
#RemoteTracking



Pediatech

| 31 companies



#Newborn
#ImmersiveTherapies
#CognitiveStimulation



Note: partial illustrative image.

Digitalization of health services in Catalonia

The digitalization of public health services in Catalonia is becoming consolidated after the boom which resulted from the COVID-19 pandemic



My Health

Personal digital health space that allows the user to interact with the Catalan health system in a non-face-to-face manner.

Users who have accessed it:



Total visitors:



Calls to 061

Telephone assistance service to resolve issues, queries or health problems.



eConsulta

Non-face-to-face care service that allows the user to send consultations to both primary care and specialty professionals.

Use by users:



Use by professional staff:



Shared clinical history

Online documents that ensure continuity of care and improve coordination among health professionals.



Note: the data refer to 2023

Multinational health companies with technology innovation centers in Catalonia

160 technological hubs of foreign companies

+9% with respect to the previous year

6,200 new jobs

Economic impact of €2.879 billion

16 hubs (10%) are in the health sector, three more than the previous year

The health sector contributed the most to employment in 2024, with 1,369 new jobs.

Technological hubs in Catalonia that focus on digital health



Source: Mobile World Capital Barcelona, ACCIÓ, Barcelona City Council: "Tech hubs overview"

Foreign investment in the health sector in Catalonia

Catalonia has been the second-ranked region in the world in attracting foreign investment projects in digital health in the last five years.

Catalonia is the leader in Spain as a whole, with 55% of total projects, 69% in invested capital and 69% in new jobs created.



Prominent companies investing in Catalonia (2020-2024)



Ranking of technological RDI in the health sector by world regions and by autonomous communities of Spain (2020-2024)

By invested capital worldwide	By number of projects worldwide	By Autonomous Communities in Spain
1. Massachusetts	1. Massachusetts	1. Catalonia
2. Catalonia	2. Ireland	2. Andalusia
3. Telangana	3. Telangana	3. Madrid
4. California	4. California	4. Basque Country
5. Ontario	5. Catalonia	5. Castilla-La Mancha

AstraZeneca



ACCIÓ Generalitat de Catalunya

AstraZeneca plans to expand its development and research center in Barcelona and increase its initial investment to **€1.3 billion** by 2027. It plans to create **1,500 new jobs** in 2025. This investment has received the support of ACCIÓ.

Source: the authors, based on fDi Markets

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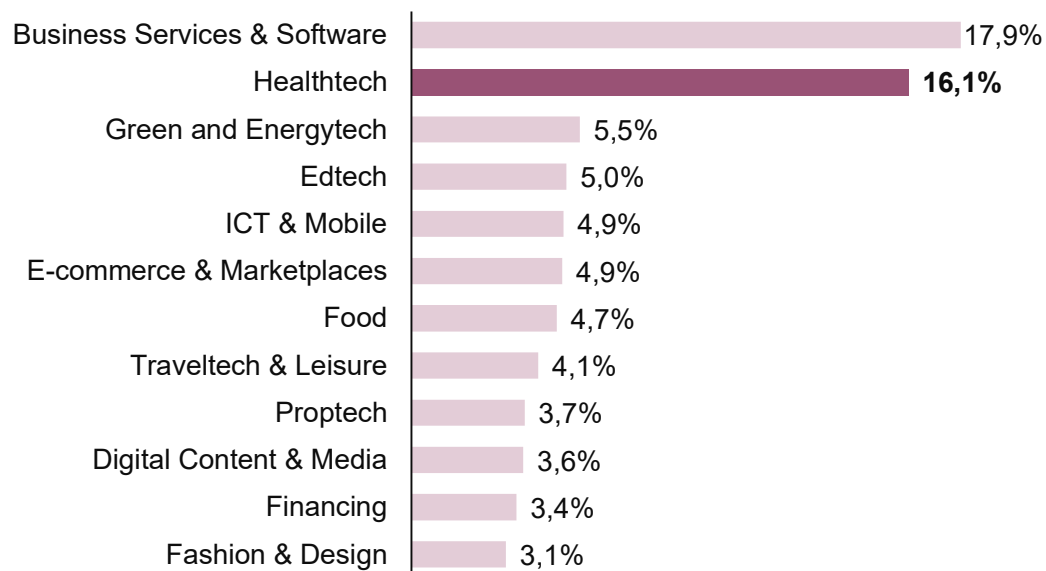
Digital health in Catalonia

7. Digital health entrepreneurial ecosystem in Catalonia

Catalan startups that focus on health technologies

The **health technology** sector brings together the largest number of startups in Catalonia, with **369 startups** accounting for **16.1%** of the total

Sectoral distribution of startups (%)



Note: this chart has been drawn up using the data of the 2,285 startups in the directory that possessed this information. The analysis has been conducted with the main sector of each company.

* Sector introduced in 2024

Sector	Number of startups
Business Services & Software	408
Healthtech	369
Green and Energytech	125
Edtech	115
ICT & Mobile	113
E-commerce & Marketplaces	112
Food	108
Traveltech & Leisure	94
Proptech	84
Digital Content & Media	83
Financing	78
Fashion & Design	70
Hardware	66
Sustainable Mobility	65
Gaming	58
Community & Social Network	55
Sports	55
Logistic Tech	54
Agriculture	46
Adtech	44
Beauty & Personal Care	44
Legaltech	30
Musictech	6
Govtech (*)	3
Total	2,285

Source: Barcelona & Catalonia Startup Hub, 2024, ACCIÓ

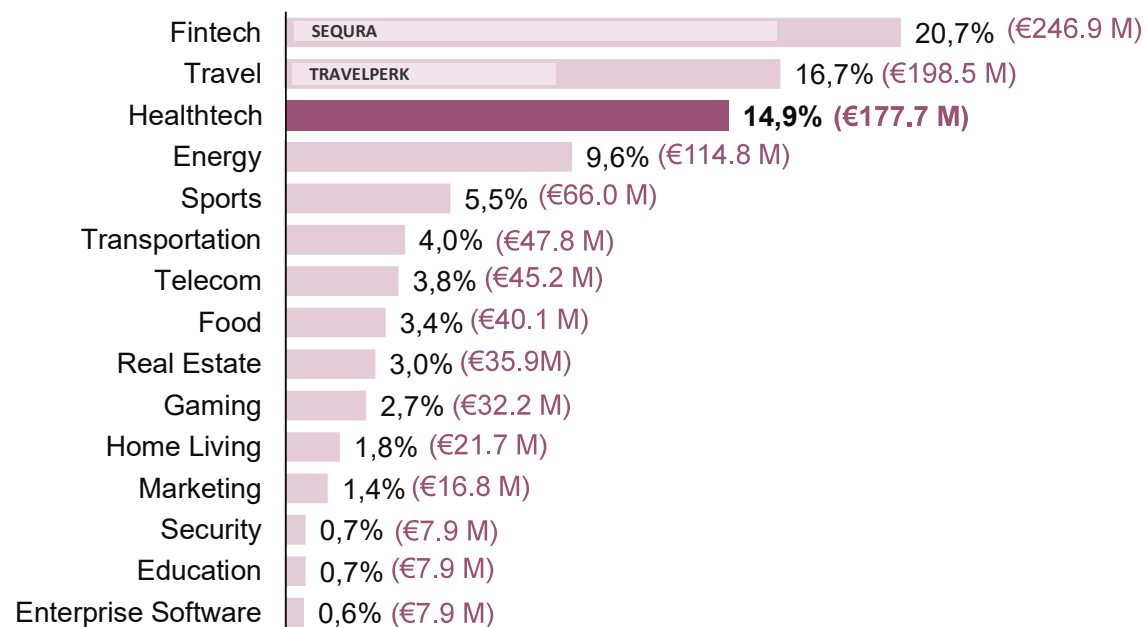
CataloniaConnects

Venture capital investment attracted by Catalan startups in 2024

43

The **health technologies** sector attracted **43% more** investment than in 2023 (from 24.1 to **177.7 million euros**) and stays among the main ones with **14.9%**.

Venture capital investment attracted by sectors (2024, % and investment volume in millions of €)



The two **mega rounds** in 2024 greatly increased the investment attracted by the **fintech** sector (20.7% of the total) and **traveltech** sector (16.7%).

Note: the chart has been drawn up in accordance with Dealroom's sectoral category

Barcelona, 5th-ranked European city in venture capital rounds closed by digital health startups

- Barcelona is the 5th-ranked European city in venture capital rounds closed by digital health startups and ranks 10th in terms of worth of rounds between 2020 and 2024.
- Specifically, 27 startups have raised 176 million dollars in 50 rounds of funding.

Main startups in Barcelona

IN INBRAIN
NEUROELECTRONICS

NE
neuroelectronics®

oliva 

IOMED

TOPDOCTORS

mediktor

mediQuo

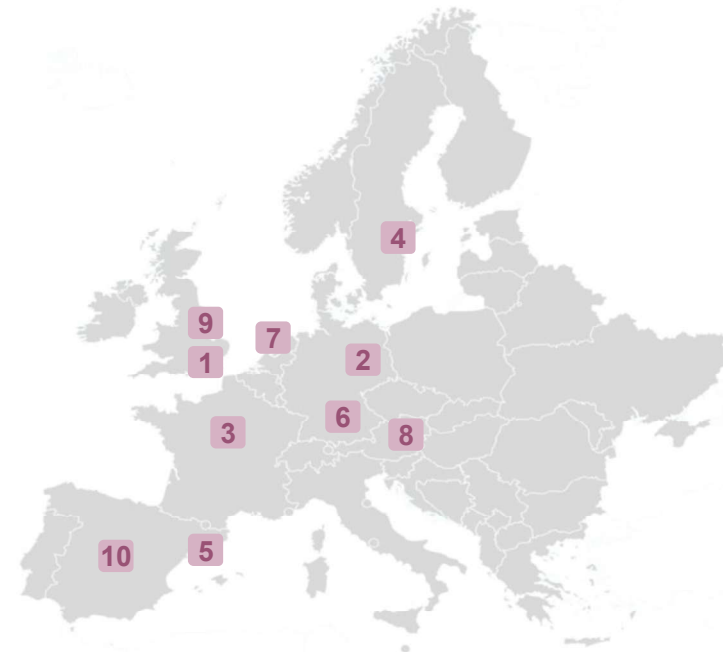
The Blue Box.

ELEM

AI application

13 startups	25 rounds	€136 M
48%	50%	77%

Top 10 European cities by completed funding rounds in artificial intelligence startups (2020-2024)



1	London
2	Berlin
3	Paris
4	Stockholm
5	Barcelona
6	Munich
7	Amsterdam
8	Vienna
9	Cambridge
10	Madrid

Digital health in Catalonia

8. Digital health in Catalan hospitals

Digital health in hospitals in Catalonia

Catalan hospitals have incorporated digital health solutions in recent years. According to a questionnaire answered by five Catalan hospitals, these are the main conclusions:

Embedded technologies

- Telemedicine
- Artificial intelligence
- Virtual Reality
- 3D printing
- Internet of things
- Robotics in surgery
- Voice assistants
- Management platforms in surgeries
- Help with decision-making
- Process robotization
- Data ecosystem
- Omics data analysis

Opportunities

- Process optimization and system efficiency
- Personalized and predictive medicine
- Patient empowerment
- Transformation of healthcare models
- Improving coordination between healthcare levels
- Healthcare system sustainability

Barriers

- Budgetary limitations
- Interoperability and technical difficulties
- Cultural barriers and resistance to change
- Strict regulations
- Ethical and safety risks
- Difficulty in moving on from pilot testing to actual implementation

Acceptance of professionals and patients

1. Positive acceptance based on the value provided
2. Participation of patients and professionals in development
3. Scalability and large-scale adoption challenges
4. Need for training for professionals and patients
5. Difficulties in adoption within the public healthcare system
6. High patient satisfaction when technology works well

Corporació de Salut del Maresme i la Selva

Consorci Sanitari Alt Penedès-Garraf

Hospital del Mar Barcelona

SJD Sant Joan de Déu Barcelona · Hospital

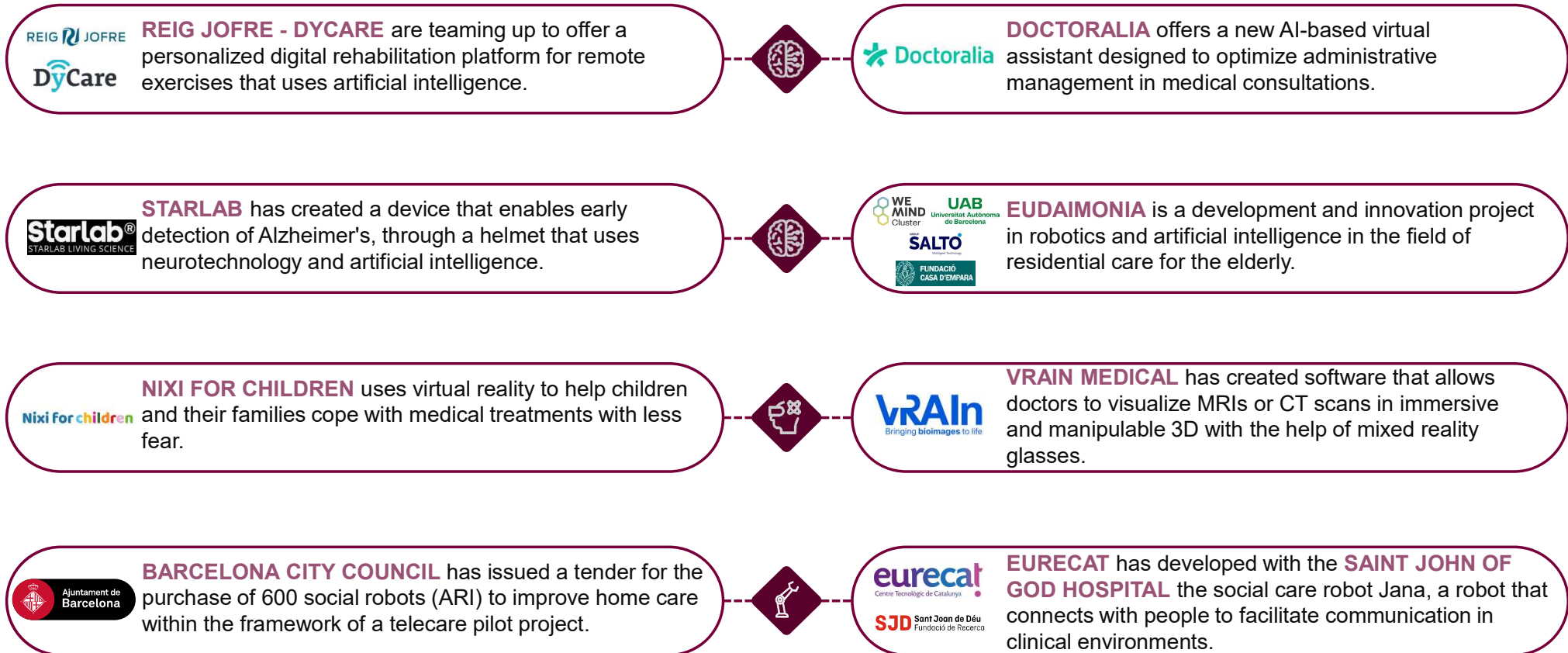
Catalonia.health Science, Innovation, Business

Digital health in Catalonia

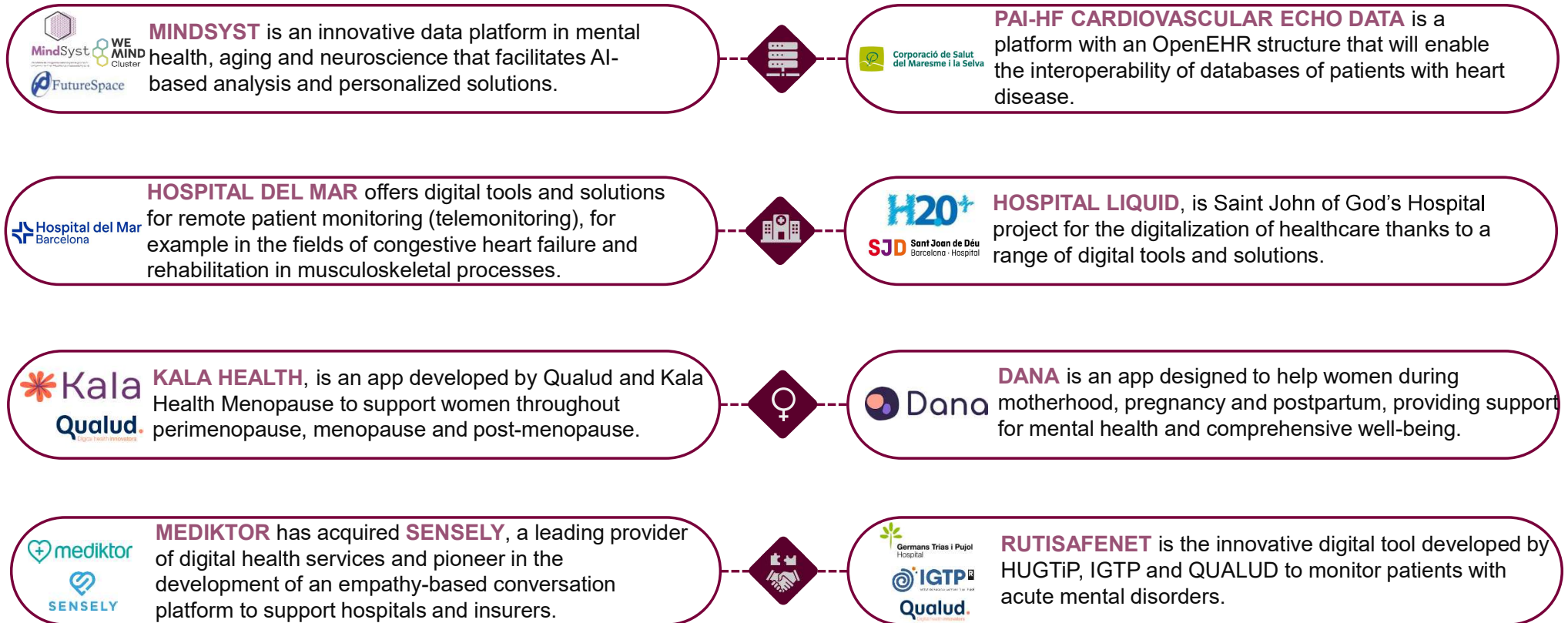
9. Success stories



Success stories in Catalonia in digital health (I)



Success stories in Catalonia in digital health (II)



Catalonia, a dynamic digital health ecosystem

369 startups in health technologies, 16.1% of the total, which have attracted **€178 million** of investment in venture capital, that is, 14.9%.

Barcelona ranks as the **5th European city** in closed venture capital rounds for digital health startups.



No. 2 region in the world in invested capital in foreign technological investment projects in the health sector (2020-2024).

16 technological hubs of foreign companies.



Local business ecosystem

386 companies engaged in digital health, a growth of **16.6%** with respect to 2024 and **44.6%** more than 2022.
Turnover of **€633 million** (+6,9%) and **5,302 jobs** (+10.2%).

A highly entrepreneurial ecosystem

Application of technological innovations

160 companies (41.5%) develop **AI tools**, **23 companies** (6.0%) **immersive technologies** and **12** (3.1%) **medical robotics companies**.
24 companies specializing in *femtech*, **25** in *ageteck* and **31** in *pediateck*

Attractive for international companies

Broad support ecosystem

Technology centers, hospital research centers, universities, incubators, associations, networks, clusters, public institutions, etc.



Interviews with institutions and companies

We would like to express our gratitude for the availability, provision of data and information for drawing up this technology report on digital health in Catalonia



Thank you!

More information about the sector and related news:

<https://catalonia.com/key-industries-technologies/technologies/digital-health-in-catalonia>



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