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Unlocking the new window for digital health in the Swiss Health Valley

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About this publication

This report, written jointly by BioAlps—Swiss Health Valley and Deloitte AG, examines how digital innovation can help address some of healthcare's major challenges, and what is needed to translate its potential into routine care. It focuses on Western Switzerland as a geographically contained setting where research institutions, healthcare providers, technology companies and innovation support organisations operate in close proximity. For the purposes of this report, Western Switzerland comprises the following six cantons: Geneva, Vaud, Valais, Fribourg, Neuchâtel and Jura.

The analysis combines ecosystem mapping, publicly available research and market data, and interviews with leaders from seven companies and institutions. It first examines the forces reshaping digital health, then explores Western Switzerland's considerable capabilities in four major health technology trends. Drawing on these findings and industry perspectives, the report identifies three priorities for the region: interoperability, scalability, and collaboration.

While grounded in Western Switzerland, these recommendations offer lessons for other healthcare ecosystems seeking to connect innovation with clinical needs, establish adoption pathways and support wider deployment.



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1 Executive summary

Across the world, healthcare systems face growing pressure to deliver more care with constrained resources. By 2030 one in six people worldwide will be aged 60 or older and the global shortfall in healthcare workers is projected to reach 11 million.[1,2] These pressures are accelerating demand for digital solutions that support prevention, clinical productivity and more personalised care.

Western Switzerland offers a compact setting in which to examine how digital innovation can respond to these pressures. Its 215 digital health technology companies, more than 70 academic and research institutions, and university hospitals bring different parts of the innovation pathway into close proximity.[3]

The region is helping to shape the future of digital health in four domains:

- wearables as monitors and digital biomarkers
- clinical AI in workflow-embedded diagnosis
- genomics and multimodal data for personalised medicine
- neurotechnology that can restore mobility

The opportunity for the Swiss Health Valley (Western Switzerland) is to convert the region's strength in innovation into a connected, deployable and scalable digital health system. Insights from interviews with CSEM, BrainQuant, SOPHiA GENETICS, SIB, ONWARD Medical, MindMaze Therapeutics and Debiopharm Innovation Fund highlight three priorities: improving access to interoperable health data, strengthening the pathway from innovation to commercial scale, and deepening collaboration between research, healthcare providers and industry.[4]



2 The new phase for digital health

Digital health is entering a new phase. Mounting pressure on healthcare systems and a more enabling policy and data environment are converging. Together, these forces are creating a window to move beyond stand-alone applications, pilots and siloed data towards digital infrastructure embedded in routine clinical workflows.

Health systems face a profound imbalance between demand and delivery capacity. Populations are ageing, chronic diseases require continuous management, healthcare workforce shortages persist, and costs continue to rise:

- by 2030, one person in six worldwide will be aged 60 or older[1]
- noncommunicable diseases caused at least 43 million deaths in 2021[5]
- the global health-worker shortfall is projected at 11 million by 2030[2]

These pressures are accelerating a shift from reactive treatment towards prevention and patient-led care. Digital health supports this transition by enabling earlier intervention through remote monitoring and predictive insights, extending care beyond hospitals through telehealth services, and freeing up clinical time through automation and decision support. Together, these technologies can help patients manage their health more independently while supporting more accessible, effective and sustainable healthcare.[6]

Capital is needed for solutions that can scale

The growing need for digital capability is reshaping the global market. Capital is becoming more selective and is focusing on solutions that can demonstrate clinical and operational value at scale.

In the United States, digital-health companies raised USD 14.2 billion in 2025, and M&A activity rose to 195 deals, 61% more than in 2024. AI-enabled companies captured 54% of funding. This reflects a market increasingly focused on companies that can automate work, support clinical decision-making and/or integrate into established care pathways.[7]

In Switzerland, the picture has been more subdued. Healthcare IT startups attracted CHF 90.1 million across 25 financing rounds in 2025, down from CHF 123.3 million across 32 rounds in 2024. This highlights the importance of securing capital to support digital health innovation and commercial scale-up.[8,9]

For Western Switzerland, the challenge is to translate its strong research base and early-stage innovation into commercially scalable businesses. Securing growth capital is vital, as well as demonstrating clinical value and developing the commercial capabilities needed for international expansion. Strengthening these foundations could help more regional innovations progress from promising technologies to sustainable businesses.



The challenge: turning innovation into application

Scaling digital health requires not just capital and technology, but also trusted data, interoperable infrastructure and clear rules for evidence, safety and deployment.

Europe is beginning to establish these foundations. The EU's European Health Data Space (EHDS) regulation entered into force in March 2025. It makes health data easier to access and exchange across care, research, regulation and innovation. In parallel, the EU AI Act raises the data quality, oversight and ongoing performance requirements for high-risk systems.[10,11]

International approaches to digital health reflect different priorities. More than 99% of US hospitals have adopted electronic health records (EHRs)[12], while China has connected more than 8,000 public hospitals to regional health information platforms[13]. South Korea also reports widespread EHR adoption (93.3% among hospitals and higher-tier institutions)[14]. Europe, by contrast, prioritises harmonised standards, data protection and patient rights through the EHDS, with mandatory cross-border data exchange beginning in 2029[15]. The challenge for Europe is to translate strong regulatory safeguards into faster, scalable digital health adoption.

At present Switzerland has strong innovation capabilities, but widespread digital health adoption remains a challenge. In 2025 the country led the Global Innovation Index for the fifteenth consecutive year, ranking second globally for knowledge and technology outputs and third for both institutional quality and market sophistication. These results highlight Switzerland's strengths in research, technological development and its broader innovation environment, which have yet to translate consistently into digital healthcare.[8,16,17]

National initiatives are seeking to close this gap. DigiSanté, the planned reform of the electronic patient record, and programmes such as Swiss Personalized Health Network (SPHN) and Biomedical Information Technology (BioMedIT) aim to improve the interoperability of health data, strengthen digital infrastructure and facilitate the use of clinical information across institutions.[18,19,20,21,22]

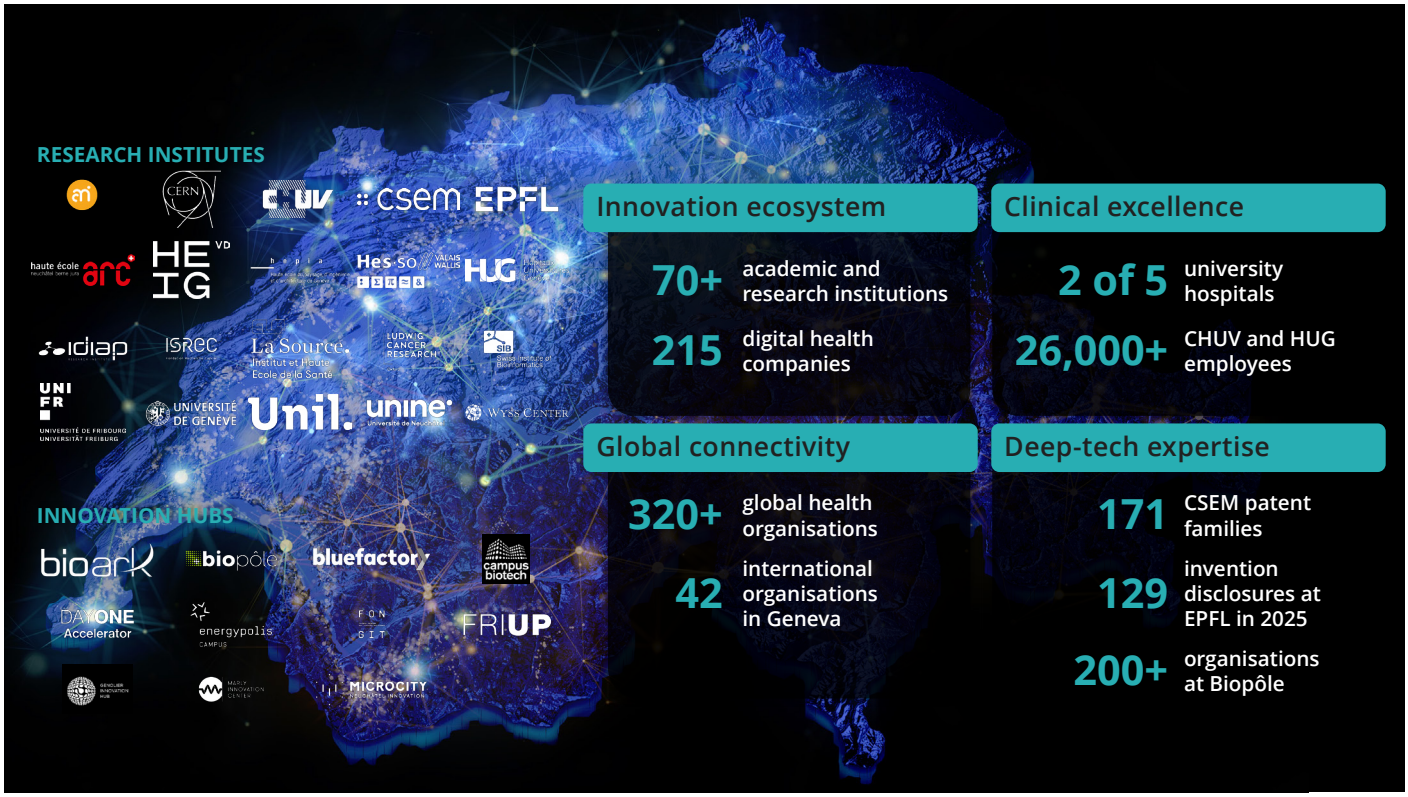
However, the electronic patient record illustrates the difficulty of translating these ambitions into practice. Despite successive initiatives since 2007, involving regional platforms and providers such as Swiss Post and Swisscom, only 136,076 records had been opened by April 2026. Fragmented implementation and limited clinical integration have constrained adoption. The planned reform aims to address these barriers by improving accessibility. Estonia's mandatory health-data sharing and Denmark's integrated patient portal suggest that success requires both consistent data exchange and practical services for patients and clinicians.[23,24] Western Switzerland's high concentration of hospitals, research institutions and technology companies could help put these lessons into practice.[25]

For years, digital health has been driven by promising innovations, often developed in isolation through individual pilots, fragmented systems and solutions that struggle to scale beyond their initial settings. A new window is now opening to move from isolated digital health innovations towards connected care. As demand for healthcare increases and the foundations for secure data exchange strengthen, the opportunity is to integrate digital solutions into clinical workflows, support their adoption by healthcare professionals and scale them across healthcare systems.



3 The digital health ecosystem in Western Switzerland

Figure 1. Institutions and capabilities within Western Switzerland's digital health ecosystem



Across six cantons, Western Switzerland brings together clinical care, academic research, engineering and company development within a relatively small geographical area. BioAlps' mapping identifies 215 digital health technology companies and more than 70 research and academic institutions.[3]

Today, the Swiss Health Valley is home to 1,900 companies, reflecting the breadth of capabilities concentrated within a relatively small area. Beyond its scale, the region brings together clinical institutions, research centres, engineering expertise, innovation campuses and international networks, creating an environment where ideas can progress from research to clinical validation and commercial development.[26,27]

Four strengths underpin this ecosystem (fig. 1). First, it brings together major clinical and academic anchors, providing medical expertise, access to patients, and settings in which new solutions can be validated. Western Switzerland is home to two of Switzerland's five university hospitals, despite representing just 26% of the Swiss population. Together, the Centre hospitalier universitaire vaudois (CHUV) in Lausanne and the Hôpitaux universitaires de Genève (HUG) employ more than 26,000 people across care, research and clinical practice. This clinical strength is internationally recognised. In Newsweek's 2026 ranking of the world's best hospitals, CHUV ranked 21st globally. HUG was also recognised in Newsweek's World's Best Smart Hospitals 2027 ranking, placing 31st worldwide and first in Switzerland for its use of advanced medical technologies.[28,29,30,31]

Second, the region has strong deep-tech capabilities relevant to digital health, including sensors, microtechnology, connected devices and data-driven innovation. The Centre Suisse d'Électronique et de Microtechnique (CSEM) alone holds 171 patent families in these fields.[32]

Third, a network of innovation campuses and technology parks connects researchers, companies and support organisations. These hubs provide the infrastructure, expertise and support needed to develop and scale new ventures.



Finally, Geneva connects Western Switzerland to the global health community. Home to 42 international organisations, including the World Health Organization (WHO), headquartered in the city since 1948, Geneva hosts more than 300 global health organisations, according to the Geneva Health Forum.[33] This concentration of international institutions provides regional digital-health innovators with access to international health programmes, strategic partnerships and opportunities for collaboration beyond Switzerland.[34]

Western Switzerland's complementary strengths

Western Switzerland's digital-health ecosystem is spread across several locations. Geneva, Vaud, Neuchâtel and Valais bring together complementary strengths spanning clinical care, research, engineering and company development.

In Geneva, the Wyss Center for Bio and Neuroengineering and the Foundation Campus Biotech Geneva, the latter supported by HUG, UNIGE, EPFL and the State of Geneva, connect leading research and healthcare institutions in neuroscience, neurotechnology and beyond. The Campus Biotech offers under one roof a unique set of state-of-the-art research platforms for research institutions and industry to shape the future of health and life sciences, including the recently launched AI Hub. The Fondation Genevoise pour l'Innovation Technologique (FONGIT—Geneva's tech startup incubator) supports company creation through coaching, financing and business development. Startups supported by FONGIT have together raised more than CHF 1 billion, demonstrating the wider ecosystem's capacity to translate technological innovation into entrepreneurial growth.[35,36]

The canton of Vaud connects research with clinical and commercial development. CHUV, L'École polytechnique fédérale de Lausanne (EPFL), the University of Lausanne (UNIL) and AGORA Cancer Research Center provide a strong base in medicine, bioengineering, health data and precision medicine.[37] EPFL also contributes to the region's AI capabilities through the Swiss Data Science Center, developed with ETH Zurich, and innovations such as Apertus, an open-source AI model, and MeditronFO, a framework for developing medical AI models.[37,38,39] The Biopôle life sciences campus in Lausanne supports emerging healthcare technology companies, notably through its Digital Health Hub, which provides dedicated infrastructure for digital health ventures,

and its Vanguard Accelerator, which supports the development and growth of innovative healthcare start-ups. Vaud-based Distalmotion, a surgical robotics company developing minimally invasive surgical solutions, illustrates the region's ability to translate medical innovation into internationally deployed technologies.[40,41]

Neuchâtel adds the engineering capabilities needed to turn ideas into products. CSEM brings expertise in sensors, electronics and connected medical technologies, helping companies develop solutions such as wearables and remote-monitoring devices.[42] Microcity's new USINNOVE ('innovation factory') HealthTech and MedTech hub further strengthens this ecosystem by providing dedicated infrastructure and support for companies developing and scaling medical technologies (fig.1).[43]

Valais combines artificial intelligence with hands-on innovation support and a strong biopharmaceutical industry. The Idiap Research Institute and Haute École Spécialisée de Suisse occidentale Valais-Wallis (HES-SO Valais-Wallis) contribute expertise in medical data, imaging and AI, with the latter offering specialised training in Digital Life Sciences at the intersection of biotechnology, AI and data analytics. The Ark and CimArk support entrepreneurs in developing and commercialising new technologies, while the annual Digital Health Connect event brings together industry experts to foster collaboration.[44,45] Idiap's role in translating research into healthcare applications is illustrated by its spin-off, Typeless, acquired by Doctolib in 2024 to strengthen AI-powered medical documentation.[46] Companies such as Lonza, Debiopharm and Siegfried further contribute to the ecosystem through digital technologies applied to drug development, laboratory processes and biopharmaceutical manufacturing (fig.1).

Fribourg and Jura complement these strengths. The University of Fribourg and startup accelerator Fri Up foster entrepreneurship, exemplified by Bewe (formerly Neuria), a university spin-off developing digital therapeutics with a presence in Lausanne. In Jura, the Switzerland Innovation Park Basel Area—Jura provides a specialised hub for medtech innovation.

ARI-SO coordinates innovation support across Western Switzerland, including coaching, support for research partnerships and sectoral networks such as BioAlps. These organisations



can help companies identify partners and navigate support programmes; clinical adoption also depends on decisions within healthcare institutions, insurers and public authorities.

Together, these capabilities make Western Switzerland a useful setting for examining the journey from innovation to clinical use. Yet geographical proximity does not ensure coordinated adoption. Fragmented data-access, validation and procurement processes remain barriers. The question is whether shared approaches can make deployment more consistent across institutions.

4 Four digital trends on the move in the region

Digital health is advancing beyond standalone technologies towards solutions that support earlier diagnosis, more personalised treatment and care beyond hospital walls. Four global trends are reshaping digital health, with Western Switzerland providing compelling examples of innovation in each area.



1 Wearables as monitors and digital biomarkers

Shift from occasional health measurements to **continuous monitoring** and **personalised guidance**.

CSEM is combining patient monitoring with an AI-powered assistant to manage hypertension.



2 Clinical AI in workflow-embedded diagnosis

Progression towards **multimodal diagnosis** and clinically validated tools that support more precise treatment decisions.

BrainQuant is developing quantitative MRI software supporting neurological diagnosis and monitoring contributing to advances in multimodal diagnosis.



3 Genomics and multimodal data for personalised medicine

Shift towards **integrated patient data** to better predict disease progression and treatment response.

SOPHiA GENETICS is using AI-powered genomic analysis and genomic data to support more personalised treatment decisions.



4 Neurotechnology that can restore mobility

Restoring neurological function through stimulation and **expanding rehabilitation through scalable digital therapies**.

MindMaze Therapeutics is developing digital therapies for personalised neurorehabilitation in hospitals and at home.

ONWARD Medical is developing spinal-cord stimulation therapies to restore hand function and sensation after injury.

#01 Wearables as monitors and digital biomarkers

Wearables are moving beyond fitness tracking towards continuous, clinically relevant monitoring that supports earlier intervention and personalised care.[47] The global digital biomarkers market is projected by Grand View Research to grow by 22.7% annually to nearly USD 14 billion by 2030. Switzerland's biomarkers sector is expected to grow even faster, from USD 97 million in 2023 to USD 463 million by 2030, a 24.9% annual increase, with wearables already its largest segment.[48,49] Adoption is also gaining ground: 41% of surveyed Swiss consumers use a smartwatch.[50] Western Switzerland is well positioned to capture this opportunity through its strengths in miniaturised sensors, microelectronics, medical technology and biomedical research.

Wearable monitoring is advancing beyond vital signs towards biochemical data, drawing on regional expertise in biosensing and microtechnology. MoleSense and Xsensio, two companies building on EPFL and CSEM capabilities, illustrate this development. MoleSense is developing a wearable sweat-sensing patch to monitor biomarkers in high-risk pregnancies and has begun early patient trials. Xsensio is developing a Lab-on-Skin platform that continuously analyses biochemical markers in sweat. The company raised USD 7 million in funding in March 2026 to accelerate clinical validation.[51,52,53]

Regional companies are also making possible a shift from occasional measurement to continuous monitoring. Neuchâtel-based Hilo, formerly Aktiia, enables continuous blood pressure monitoring without an inflatable cuff by using optical sensors to detect changes in blood flow and algorithms to estimate blood pressure from the resulting pulse signals.[54]

Other ventures are moving wearables beyond general wellness towards care for specific conditions. Vaud-based DigeHealth is developing an acoustic wearable that uses AI to monitor gastrointestinal function.[55] These examples are on the approval pathway, from early patient testing to regulatory clearance.

The next opportunity for wearables lies in turning continuous health data into actionable insights for patients. Neuchâtel-based CSEM highlights an ongoing pilot exploring the use of an AI-powered assistant to support people with hypertension. By combining patient monitoring with personalised guidance, such solutions could help individuals manage chronic conditions more independently and enable earlier intervention. Western Switzerland's expertise in wearable technologies could support the shift from passive monitoring towards more proactive, home-based care.[i]



#02 Clinical AI in workflow-embedded diagnosis

The next wave of clinical AI will combine medical imaging, genomic data and electronic health records to enable earlier, more accurate diagnosis and more personalised treatment decisions. Switzerland and, in particular, the western region are well placed to propel this shift through EPFL, CHUV, HUG and a growing network of health-data and AI ventures. Swiss public support is also encouraging: 60% of surveyed citizens view digitalisation as essential to healthcare.[56] The time is right to turn research excellence into AI tools trusted for everyday care.

The first step is to bring together different data sources to improve diagnosis and treatment decisions. AI can combine medical images, genomic profiles and clinical records to identify patterns that can be difficult to detect through individual tests. The National AI Initiative for Precision Oncology brings together imaging, genomic and clinical data to improve cancer diagnosis and treatment selection.[57] Tune Insight, based in Lausanne, enables hospitals to analyse sensitive information collaboratively without transferring patient data between institutions.[56] Such approaches demonstrate how secure data collaboration can expand the clinical value of AI while respecting data protection requirements.

i. Certain insights presented in this report are based on interviews conducted with industry stakeholders as part of the BioAlps–Deloitte study.



Enhancing transparency and clinical validation is another potential growth area. EPFL's MeditronFO, the first fully open framework for developing large language models for medicine, enables hospitals, experts and regulators to examine training data and methods, strengthening transparency and accountability in medical AI.[58] The related MOOVE-CHUV initiative involves clinicians in evaluating medical AI against real-world practice, rather than relying only on technical benchmarks.[59] These initiatives highlight the importance of ensuring that AI-generated diagnostic insights are accurate, explainable and clinically relevant before they are adopted in routine care.

Beyond clinical validation, advances in quantitative imaging are creating new opportunities for neurological diagnosis. Geneva-based BrainQuant, an EPFL spin-off supported by the Wyss Center, is developing software that measures cerebral blood flow using arterial spin labelling (ASL), adding just five minutes to a standard MRI scan. As new dementia treatments increase the need for patient selection and monitoring, this technology could offer a more accessible, lower-cost and radiation-free approach to assessing brain perfusion. In its interview[ii], BrainQuant highlighted the Wyss Center's role in helping EPFL researchers translate their technology into a company, illustrating how Western Switzerland's innovation ecosystem supports the transition from scientific research to entrepreneurship.

ii. Certain insights presented in this report are based on interviews conducted with industry stakeholders as part of the BioAlps–Deloitte study.

The importance of trusted AI extends beyond clinical settings as patients increasingly turn to digital tools for health information. According to the CSS Health Study 2026, 42% of Swiss respondents use AI chatbots to interpret health symptoms, up from 20% in 2025.[60] This growing reliance on AI reinforces the need for trusted, clinically validated solutions that support rather than replace medical expertise.

#03 Genomics and multimodal data for personalised medicine

Sixty-two percent of C-suite executives surveyed across the US, Europe (including Switzerland) and Asia expect cell, gene and RNA-based therapies to drive revenue growth over the next two to three years.[61]

Western Switzerland is well positioned to contribute, building on decades of bioinformatics expertise. Founded in 1998, the Swiss Institute of Bioinformatics (SIB) has played a foundational role in developing the data resources, tools and expertise underpinning advances in genomics, proteomics and systems biology. Alongside leading university hospitals and innovative companies, SIB continues to strengthen the region's capacity to translate complex biomedical data into personalised medicine.

Precision medicine is moving from isolated genomic profiles towards multimodal patient models. Vaud-based SOPHiA GENETICS has analysed more than two million genomic profiles through its AI-powered platform which serves healthcare institutions across 72 countries.[62] Its Digital Twins technology combines clinical, biological, imaging and genomic data to provide a more comprehensive picture of patients' conditions, with the aim of improving predictions of disease progression and the treatment response.[63] SOPHiA GENETICS aims to expand the types of patient data it analyses and to track how patients respond to treatments over time. This would allow hospitals to draw on insights from similar cases worldwide, supporting more informed treatment decisions, particularly for complex cancers.

Omics technologies are becoming scalable enough to support drug discovery and large clinical studies. Lausanne-based Alithea Genomics has developed RNA-sequencing technologies that can reduce reagent consumption and manual processing steps by up to 90% compared with conventional workflows. Building on these advances, its latest platform can prepare up to 1,536 RNA samples in a single workflow, enabling large-scale transcriptomic analysis. The company secured CHF 6.9 million in seed financing in 2026 to accelerate commercialisation and develop data assets for AI-enabled research.[64,65]

Interviews with SOPHiA GENETICS and SIB reveal a distinctive advantage for Western Switzerland in precision medicine: the combination of specialised computational talent, high-quality biomedical data and trusted international collaboration. In its interview, SOPHiA GENETICS cited access to EPFL talent as the primary reason for establishing the company in the region, with 20–25% of its Swiss workforce having studied or worked at EPFL. SIB highlighted Geneva's genetically diverse clinical data and Switzerland's experience navigating complex data-sharing frameworks—an area of expertise that is increasingly relevant to international research. Both interviewees stressed that the next breakthrough will depend less on developing new AI models than on connecting clinical and genomic data. In their view Western Switzerland is poised to play a leading role in trusted, data-driven precision medicine, provided the region can turn its research and data assets into routinely accessible clinical resources.[iii]

#04 Neurotechnology that can restore mobility

North America led the global neurotechnology market in 2025 but Europe's projected growth rate is the highest of any continent. The market is projected by Research and Markets to expand from USD 19.8 billion in 2026 to USD 33.6 billion by 2030, representing annual growth of approximately 14.2% (+69.7%), while Deloitte estimates annual growth of 27.8% in digital-health applications in neuroscience.[66,67]

Western Switzerland builds on a long-standing neuroscience research base, anchored by EPFL's Brain Mind Institute and Neuro-X, which combine neuroscience, neural engineering and computing. Landmark initiatives such as the Blue Brain Project have laid the foundations for advances in neurotechnology, while NeuroRestore, bringing together EPFL, CHUV and UNIL, translates research into clinical applications. The Clinique Romande de Réadaptation in Sion, treating more than 1,000 patients annually, further strengthens this pathway from scientific discovery to patient care.[68]

Non-invasive neurostimulation is bringing restorative therapies closer to routine care. Vaud-based ONWARD Medical's ARC-EX is the first non-invasive spinal-cord stimulation system authorised by the US FDA to improve hand strength and sensation after chronic spinal-cord injury. Its European CE marking now supports both clinical and home use.[69,70]

Brain-computer interfaces (BCI) are translating movement intention into action. Researchers from EPFL, CHUV and UNIL, working across Geneva's Campus Biotech and Lausanne's NeuroRestore centre, developed a wireless brain-spine interface that enabled a person with chronic spinal-cord injury to stand, walk and climb stairs. This breakthrough highlights Western Switzerland's strength in translating neuroscience research into restorative therapies.[71]

Digital rehabilitation is extending neurological care beyond specialised centres. Lausanne-based MindMaze Therapeutics is working with Vibra Healthcare to introduce its FDA-listed digital neurotherapeutics platform to leading US health systems.[72] This illustrates Western Switzerland's potential to scale clinically validated rehabilitation solutions internationally, supported by trained providers and sustainable reimbursement pathways.

ONWARD Medical's co-founder sees the proximity of EPFL, CHUV and UNIL and their close scientific collaboration as central to developing spinal-cord stimulation therapies that restore neurological function. MindMaze Therapeutics also highlighted the role of academic and regional clinical partners in testing and validating its technologies before international expansion. Its experience is illustrative of a shift towards scalable rehabilitation: a multi-site US deployment demonstrated that high-dose, high-intensity therapy recommended by guidelines can be delivered at scale.

Interviews with ONWARD Medical and MindMaze Therapeutics highlighted two complementary trends in neurotechnology: the development of advanced neuromodulation and brain-computer interfaces to restore neurological function; and the growing use of software-based rehabilitation to deliver more intensive, personalised therapy at home. These examples illustrate a regional strength that extends beyond scientific discovery: the capacity to develop, clinically validate and export restorative neurotechnologies, with further potential to accelerate their adoption in routine care. Reimbursement and clinical adoption nevertheless remain persistent barriers across the sector, although progress is visible. MindMaze Therapeutics' platform is supported by dedicated US CPT Category III codes for remote, motion capture-based neurorehabilitative therapy, allowing home-based therapy to be billed.[iii]

iii. Certain insights presented in this report are based on interviews conducted with industry stakeholders as part of the BioAlps–Deloitte study.

5 From strong foundations to greater impact: opportunities for Western Switzerland

Figure 2. Three priorities for the ecosystem

	TODAY	OPPORTUNITIES	WHAT CAN BE NEXT
 INTEROPERABILITY	• Secure exchange advancing • Approvals still vary • Epic–DPI+ gaps remain	• Align data-access requirements • Coordinate approval procedures • Standardise data for reuse	• Build on SPHN/BioMedIT to develop shared data-access application and templates • Pilot the application at CHUV/HUG using one defined research data set
 SCALABILITY	• Strong early innovation • Limited growth capital • Few first customers	• Unlock later-stage funding • Accelerate clinical adoption • Back first paid deployments	• Convene Innosuisse, investors, and hospitals to explore alternative funding models (e.g. acting as first customers)
 COLLABORATION	• Strong research networks • Institutions repeat evaluations • Procurement slows rollout	• Create shared adoption pathways • Standardise technology evaluation across hospitals • Jointly demystify digital innovation	• UNIL/UNIGE: strengthen digital health programmes • CHUV/HUG: test shared evaluation criteria and align procurement requirements

Western Switzerland offers a compact setting in which to test these changes across a small number of institutions. Initial projects should establish whether shared processes shorten data-access times, help providers make purchasing decisions and reduce the effort required to deploy a solution at a second site. These results would provide a basis for deciding what to extend more widely.

Interoperability—connect health data to enable AI and personalised care

Switzerland is strengthening the infrastructure needed to connect biomedical information across institutions. SPHN links all five Swiss university hospitals and involves around 1,000 researchers and clinicians, with consented data available from 800,000 patients.[73] Coordinated by the Swiss Institute of Bioinformatics (SIB) and its partners, SPHN provides Switzerland with a good basis with which to turn fragmented datasets into research and, ultimately, personalised care.

The challenge, however, is increasingly one of access and integration rather than data availability. SPHN has developed common standards and secure research environments to facilitate the secondary use of clinical data across Switzerland's university hospitals, but institutional agreements, ethical approvals and incompatible information systems continue to slow access. According to SIB, some clinical data requests can take up to 24 months.

SOPHiA GENETICS identified difficulties extracting information from electronic health records as a major barrier to deploying multimodal AI in routine care. Beyond access, data must also be usable: a Global Digital Health Partnership study found that Swiss healthcare systems often exchanged unstructured documents that clinicians could view but not automatically integrate into patient records.[74] This limits the practical value of data sharing for clinical decisions and coordinated care.

Switzerland is already taking steps to address these barriers. The federal DigiSanté programme, running from 2025 to 2034, aims to improve the standardisation and exchange of health information across the healthcare system.[75] Alongside SPHN and BioMedIT, it provides a foundation for connecting research and clinical infrastructure while protecting sensitive patient information. Western Switzerland is also translating these efforts into practical applications through its expertise in bioinformatics, secure computing and clinical research. CHUV, HUG and research partners have collaborated on Medical Collective to enable secure analysis of clinical data across hospitals, while EPFL spin-off Tune Insight is working with SPHN and university hospitals to facilitate cross-institutional data analysis. These initiatives demonstrate the region's progress in making healthcare data more accessible and usable while preserving data privacy.[76,77,78,79]

The next opportunity is to build on this progress and make secure data exchange easier and more consistent across institutions. Regional hospitals are already modernising their clinical information systems through different approaches: CHUV has selected Epic Systems, while HUG and Hôpital du Valais are jointly developing DPI+ (Dossier Patient Informatisé), a clinical software platform designed to strengthen digital sovereignty.[80] Ensuring interoperability between these systems will be essential to enabling seamless data exchange without requiring hospitals to adopt the same technology. Building on existing initiatives, common data standards, streamlined approval procedures and reusable agreements could help extend secure data sharing into routine research and clinical care, reducing administrative delays and supporting the wider adoption of data-driven healthcare solutions across Western Switzerland.

Scalability—strengthen the pathway from innovation to scale

Western Switzerland has developed a strong environment for early-stage innovation, but the region's path towards commercial scale remains less well established. Research institutions, incubators and public support mechanisms need to help generate new ventures, while access to specialised talent supports the development of new technology. The challenge comes when companies move beyond proof of concept and require larger investments, regulatory approval, clinical validation and access to international customers. Strengthening the transition process would allow more innovations to develop into sustainable businesses rooted in the region.





Access to growth capital is one part of this challenge. Switzerland's venture financing market supports company formation through dilutive and non-dilutive early-stage financing, but larger funding rounds remain difficult for capital-intensive healthcare technologies. Interviews with ONWARD Medical, SOPHiA GENETICS and Debiopharm Innovation Fund corroborate this. The challenge is particularly acute for companies requiring substantial investment in pharma R&D technologies and commercial expansion. Western Switzerland needs more growth capital and stronger business capabilities to scale internationally and retain strategic activities in the region.

Beyond financing, commercial adoption presents a second challenge. Clinical pilots deliver limited value unless organisations can successfully scale their solutions and translate them into meaningful outcomes.[81] In healthcare this transition is particularly demanding because companies must demonstrate clinical effectiveness, integrate their solutions into routine clinical practice and secure reimbursement. ONWARD Medical and MindMaze Therapeutics interviewees highlight the difficulty of converting clinical evidence into routine adoption across the sector. But steps are being taken to address the problem. The Swiss Neuro Rehab project, which is supported by Innosuisse, the Swiss innovation agency, and coordinated by CHUV, brings together researchers, healthcare providers and industry partners to test digital rehabilitation across hospitals, outpatient facilities and patients' homes. Its high-dose, high-intensity neurorehabilitation study, sponsored by CHUV with MindMaze Therapeutics as an industry partner, spans several Swiss centres across inpatient, outpatient and home-based care. By evaluating clinical outcomes, treatment delivery and economic value in these settings, the initiative aims to generate the evidence needed to support broader adoption and inform future reimbursement models.[82]

A clearer route to commercial adoption would benefit both companies and healthcare organisations. Companies would be better placed to demonstrate customer demand and implementation costs alongside clinical results when seeking growth capital. Hospital departments and rehabilitation centres would have a stronger basis for assessing staffing requirements, integration costs and the funding needed to continue using a technology. The opportunity extends beyond obtaining a first contract: it is to make subsequent deployments more predictable and commercially sustainable.

Collaboration—turning many institutions into a collective advantage

Existing partnerships show how research institutions, healthcare providers and companies can work together on clinical development. ONWARD Medical's development has benefited from close relationships with EPFL, CHUV and UNIL, while the Swiss Neuro Rehab initiative demonstrates how academic institutions, healthcare providers and technology partners can collaborate on the practical adoption of digital therapies.

The wider opportunity is to make the knowledge generated through these relationships useful beyond the original partnership. A hospital rehabilitation department and an outpatient rehabilitation centre considering digital therapy need to understand its clinical evidence, suitable patient groups, staff training requirements and implications for treatment delivery. Experience from another institution can inform these decisions, although local clinical, technical and purchasing assessments remain necessary.

Closer exchange between clinicians, technology developers, hospital IT and procurement teams, and insurers could make these requirements visible earlier. This would help companies design technologies around actual care delivery and help healthcare organisations assess whether findings from another setting apply to their patients and workflows.

6 Recommendations: turning digital health innovation into clinical impact

Building on Western Switzerland's strong digital health innovation ecosystem, three priorities emerge to accelerate clinical adoption and sustainable growth, with relevance beyond the region.

Interoperability

Regional hospitals need to align data-access requirements and approval procedures, building on SPHN and BioMedIT to reduce administrative delays while maintaining data protection. Common agreements and consistent data standards are essential to making information usable across institutions. As an initial application, two university hospitals, supported by SIB, could test a shared application process and agreement template for a defined research dataset, identifying which approvals can be coordinated and measuring the time to authorised access.

Scalability

Digital health companies need coordinated support for clinical validation, regulatory requirements, reimbursement and access to growth capital. Innovation support agencies, clinical partners, insurers and investors should help companies address these requirements early, so successful validation can lead to sustainable deployment. Cantonal innovation agencies could convene these actors to explore alternative ways of financing initial adoption, including customer-funded development or deployment, where an organisation supports an innovation by purchasing and using it.

Collaboration

Closer collaboration between universities, healthcare institutions and technology companies is needed to demystify digital innovation and establish clear pathways for its adoption in clinical practice. UNIL and UNIGE's medical faculties could develop or strengthen dedicated digital health programmes grounded in practical care needs. In parallel, CHUV and HUG's clinical, IT and procurement teams could jointly test shared evaluation frameworks and harmonised procurement requirements for a defined application, reducing duplicated work and making adoption experience transferable between institutions.



The value of examining Western Switzerland lies in understanding how closely located actors can overcome the barriers between innovation and everyday care. Shared data-access processes, paid clinical pilots and coordinated evaluation could provide practical tests of what works—and what does not. Assessing these efforts against patient outcomes, clinical workload and economic sustainability would help determine which approaches merit wider adoption, within the region and beyond.

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About this publication
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BioAlps is the entry point of the Swiss Health Valley and is Western Switzerland's life sciences cluster. The association helps life sciences companies to create contacts in the region and, through its many events, builds a strong community. BioAlps association offers a dynamic network in medtech, biotech, pharma, digital health, biotools, foodtech and cosmetics. With more than 1,900 companies, 110+ Public Institutions, Innovation Parks and Foundation, 2 University Hospitals (HUG and CHUV), the region is the most diversified life sciences ecosystem in Europe. Startup companies, large multinationals and support organisations are concentrated in a small, attractive geographic area with great infrastructure, and are all working together across the cantons of Western Switzerland in a close-knit network.

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