

Guest Editorial

The **International Congress DigiHealthDayS-2024**, held at the European Campus Rottal-Inn (ECRI), Deggendorf Institute of Technology, once again served as a Global Forum for Education, Research, Innovation, and Networking in Digital Health. Under the overarching theme “*Global Digital Health – today, tomorrow, and beyond*,” this 5th Jubilee Edition brought together around 500 leaders, experts, and students from across the world. Participants engaged in a unique convergence of perspectives with keynote addresses from eminent speakers, thought-provoking student presentations, and lively dialogue sessions. Previous issues of the Proceedings are available in the *JAIR archives*.

Featured Papers

The five selected papers in this year’s collection span the breadth of Digital Health education, health systems innovation, and scientific exploration.

The concept paper on a globally harmonized Master of Digital Health (MDH) degree proposes the establishment of an MDH Alliance. The authors argue for harmonized curricula, accreditation systems, and a clear professional identity for Digital Health Specialists, highlighting the urgent workforce needs of the ongoing Digital Transformation.

From Austria, a study of an electronic documentation application for Helicopter Emergency Medical Services highlights the importance of a transition from paper to electronic medical records in high-stress environments. With a usability score and qualitative feedback emphasizing automation and integration, the study underscores the necessity of user-centered design in emergency medicine.

Expanding into pharmacovigilance, a comparative study of Germany and Egypt investigates the use of electronic health records (EHRs) and artificial intelligence (AI) for detecting adverse drug reactions. The authors highlight strong professional support for such tools and the opportunities they offer for pharmacovigilance systems.

The business models of Digital Health start-ups in Europe are analyzed in a framework-based study, identifying archetypes of innovation strategies. The findings stress the importance of stakeholder collaboration, strong value propositions, and sustainability in a highly competitive market, while also recognizing the high attrition rate of Digital Health ventures.

Finally, a theoretical exploration of bioelectronic medicine presents a frontier approach to non-communicable diseases. Building on the magnetoelectrochemical theory of metabolism, the authors propose integrating nanolevel biophysics into medical knowledge, positioning bioelectronic medicine as a promising but still nascent paradigm requiring further research and educational initiatives.

Together, these papers reflect the diversity of Digital Health research and innovation: from educational harmonization and clinical usability to systemic adoption of AI and entrepreneurial innovation, extending even into emerging scientific paradigms.

Communiqués

The nine communiqués capture the rich discussions, dialogues, and reflections from DigiHealthDayS-2024, illustrating the event’s role as a global forum for exchange.

The Alumni Voice session highlighted the career trajectories of graduates of the Master of Digital Health, reinforcing the importance of Digital Health literacy and mentorship networks. Complementing this, the Scientific Session showcased applications of AI and digital tools in areas ranging from pharmacovigilance and cancer to mobile screening, genomics, and medical education.

Patient engagement was the focus of a communiqué emphasizing co-creation, real-world evidence, and ethical compensation, while another explored the philosophical and practical divide between informatics as science and digitalization as practice, advocating for interdisciplinary collaboration and contextual adaptation of solutions.

Innovation emerged strongly in the session “El Futuro Es Nuestro”, where students presented healthcare solutions with global relevance, supported by a keynote from HIMSS leadership. A complementary session on digital maturity, health data and global policy examined frameworks such as the European Health Data Space and WHO strategies in emphasizing alignment of governance, workforce, and technology.

Further perspectives included a discussion on scaling Digital Health at national and international levels. A critical panel on the EHDS and its capacity to deliver high-quality datasets for AI was presented. Another dialogue concluded with a high-level debate on the future of AI in healthcare, balancing its transformative promise with ethical, regulatory, and global competitiveness concerns.

Together, these communiqués illustrate a Digital Health community deeply engaged with the educational, clinical, systemic, and ethical dimensions of transformation. They remind us that progress in Digital Health requires not only technological advances, but also collaborative networks, regulatory foresight, and patient-centered innovation.

As this special issue illustrates, DigiHealthDayS-2024 was not only a celebration of ideas but also a platform for action. The five featured papers and nine communiqués reflect the richness of discussions that spanned education, workforce development, usability, innovation, policy, patient engagement, and the ethical integration of AI. We extend our sincere gratitude to our sponsors, partners, and the vibrant DigiHealthDay community for their support. Looking ahead, we remain inspired by the vision that drives DigiHealthDay, that is, to create a Digital Health future that is smarter, fairer, and more human-centered.

Prof. Dr. Dipak Kalra, International Chair of DigiHealthDay

Prof. Dr. Horst Kunhardt, Scientific Chair of DigiHealthDay

Prof. Dr. Georgi Chaltikyan, Organizing Committee Chair of DigiHealthDay

Prof. Dr. Ozar Mintser, Editor-in-Chief of Ukrainian Journal of Medical Informatics and Engineering

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