

Training and Certification in Digital Health Technologies

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Abstract. This workshop explores the critical aspects of developing certification programs in digital health technologies. Participants will gain insights into the standards and principles necessary for establishing effective certifications, analyze a successful case study, and engage in a dynamic Q&A session. Designed for healthcare professionals and educators, this concise workshop aims to equip attendees with foundational knowledge to initiate and enhance certification processes within their organizations.

Keywords. Training, certification, digital health

1. Introduction

As digital health technologies increasingly become integral to modern healthcare delivery, the development of robust certification programs to ensure the proficiency and credibility of professionals in this field is essential. This workshop is designed to address the growing need for systematic and effective certification processes that validate skills and knowledge in digital health applications—from telemedicine to data analytics in healthcare settings. Our proposed workshop will explore the intricate procedures involved in creating, implementing, and maintaining certification programs tailored for the digital health sector. It will bring together industry experts, academic leaders, and certification authorities to discuss best practices, challenges, and innovative solutions in

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certifying digital health competencies. Participants will gain a deep understanding of the standards required for accreditation and the steps necessary to develop a curriculum that meets these standards. This initiative is critical for ensuring that the workforce is equipped with a verified skill set that meets industry standards and for fostering a culture of continuous improvement and professional development in the digital health arena.

2. Aim

The primary aim of this workshop is to equip participants with the basic knowledge and tools necessary to develop and manage effective certification programs in digital health technologies. Participants will learn to: 1) Understand the foundational principles and standards required for digital health certification. 2) Design comprehensive certification curricula that encompass essential digital health competencies. 3) Navigate the regulatory and accreditation processes relevant to certification in healthcare technologies.

3. Rationale

As digital health continues to reshape healthcare, there is an imperative need to standardize and validate the expertise of professionals in this field. Certification programs not only help in maintaining professional standards but also ensure that the workforce is adequately prepared to handle advanced technologies safely and effectively. However, the development of these programs involves complex procedures that must align with evolving technological, ethical, and regulatory landscapes. This workshop addresses these complexities by: 1) Providing a platform for learning from experienced practitioners and accrediting bodies. 2) Facilitating discussions on current challenges and future directions in digital health certification. 3) Sharing best practices and innovative approaches from existing certification models.

4. Expected outcomes

Upon completion of this workshop, participants will be able to: 1) Draft Prototypical Certification Models: Develop initial models for certification programs that can be customized to various sub-specialties within digital health. 2) Implement Best Practices: Apply the best practices learned from case studies and expert insights 3) Foster Networking Opportunities: Establish connections with a network of peers and experts, which can be instrumental in collaborative efforts and mutual learning in future certification initiatives. 4) Develop Evaluation Strategies: Design effective assessment and evaluation strategies to ensure that certification programs are comprehensive and produce qualified, competent professionals.

5. Indicative program

Welcome and Introduction (5 minutes)

- Brief introduction by the host.

- Overview of the workshop's goals and what participants should expect to learn.
- Presentation: Foundations of Certification in Digital Health (20 minutes)
- Overview of digital health technologies requiring certification.
 - Importance of certification for professionals and organizations.
 - Key principles and standards for developing a certification program.
- Case Study Analysis (15 minutes)
- Quick review of a successful certification program in digital health.
 - Discuss the steps taken, challenges faced, and outcomes achieved.
- Interactive Q&A Session (15 minutes)
- Open the floor for participants to ask questions based on the presentation and case study. Provide clarifications and additional insights.
- Closing Remarks and Next Steps (5 minutes)
- Summarize key points discussed.
 - Provide information on resources for further learning.
 - Encourage networking and collaboration among participants for future developments.

6. Brief CVs

Dr. Emmanouil Rigas is a computer scientist and holds a PhD in Artificial Intelligence and is currently applying his research in semantic interoperability issues in digital health applications and in AI-based decision making.

Prof. Lacramioara Stoicu-Tivadar acts as PhD Coordinator in Computers and Information Technology mainly with topics related to digital health. Specifically Virtual Reality in healthcare education and clinical activity, AI applied in medicine and active aging. She actively participates in several conferences, societies and organizations.

Dr. Antonis Billis is an Electrical and Computer Engineer, specializing in the research of digital biomarkers for remote patient monitoring. His research interests focus on eHealth / mHealth, digital biomarkers, clinical decision support, intelligent patient monitoring systems and assistive technologies for vulnerable populations.

Ms. Maria Nikolaidou has worked in Greek and European Commission's research institutes and has strong experience in research programs in the fields of knowledge management, information systems and medical education. She has acted as project manager in several projects.

Mr. Savvas Anastasiadis is a computer scientist with a wide experience in the setting of and management of large-scale information systems as well as in managing and configuring online learning platforms.

Prof. Panagiotis Bamidis is a Professor of Medical Physics, Informatics and Medical Education and Director of the Lab of Medical Physics and Digital Innovation in the School of Medicine of the Aristotle University of Thessaloniki (AUTH), Greece.

Prof. John Mantas is Professor in Health Informatics at the University of Athens and has long-term knowledge and experience in the area of health informatics having published a large number of scientific papers and coordinated national and European projects. He was past President of EFMI and Vice President of IMIA, Vice President of the Cyprus University of Technology and Dean of School of Health Sciences. He is currently chairing the EFMI AC2 Committee.