# Redefining the Digital Competence Framework in Healthcare

> 📅 Saturday, 23 July 2022

> 📍 *Menteith (-1, Edinburgh International Conference Centre Limited)*

## Abstract

**Background:** Digitalization is a societal transformation that is expected to play a vital role in achieving the Sustainable Development Goals (SDGs). The so-called Digital Revolution is projected to contribute to ensuring a resilient recovery from Covid-19 by making it possible for healthcare professionals to address the challenges involved through digitalization. In fact, developing the digital competence of healthcare workers is quickly becoming a requirement as a result of the challenges emerging from the Covid-19 pandemic. Therefore, in addition to the fact that educators in the field of healthcare training have had to bring their education programs online due to the constraints imposed by the current landscape (e.g., social distancing), these healthcare professionals should consider expanding the existing core competencies taught in the education system to include the development of digital competence. Furthermore, despite the significant need for digital competence in the healthcare context, the existing literature shows that its conceptual framework is limited. In light of these facts, the refinement of the concept of digital competence is vital to making it possible to develop a framework that is relevant and applicable to both education and practice in the context of healthcare.

**Purpose:** This study addresses the initial phase of the development of a conceptual framework of digital competence in the healthcare context.

**Methods:** A draft of our Digital Competence Framework was created following the initial phase of synthetizing the available knowledge by means of a scoping review and a panel discussion with a group of experts. More specifically, the review was conducted using the methodological framework proposed by Arksey and O'Malley (2005), with the help of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). Then, a list of competence domains was compiled from the research literature and assessed by the panel of experts.

**Results:** The results indicate that the existing digital competence framework in the context of healthcare does not satisfy the needs presented by the recent advances in digitalization. The panel discussion produced a definition of digital competence: the cognitive-thinking ability and practical skills required to utilize digital media and resources in the context of healthcare, embracing new

technologies as they emerge in our era of the Digital Revolution. On the basis of this definition, our proposed Digital Competence Framework consists of 5 domains (Basic Computerizations; Digital Media and Resources Utilization, Proficiency in Digital Communication; Cognition in Digital Learning; Safety in Digital Environment), with 11 sub-domains and 34 competencies.

**Conclusion:** The proposed framework can be adapted to the requirements of specific disciplines within the scope of healthcare.

keywords: *digital competences, framework, healthcare, COVID-19*

## Primary Presenting Author

**Dhea Natashia**
National Cheng Kung University

## Authors

Muhammad Hadi
Universitas Muhammadiyah Jakarta

## Secondary Presenting Authors

Hui-Ying Hsu
National Cheng Kung University

## Authors

Yu-Yun Hsu
National Cheng Kung University

Mei-Feng Lin
National Cheng Kung University

## Secondary Presenting Authors

Miaofen Yen
National Cheng Kung University

## View Related