Artificial intelligence and digital health

Artificial intelligence (AI) and digital health are changing the way we live and work. They are already and increasingly present in medicine and are slowly permeating the medical writing industry. For many medical writers, this raises the question whether these new technologies will be friends or foes, whether they will make our work easier, or whether "we will be replaced by robots". In the context of this trending and somehow "alarming" discussion, I had the privilege to put together this issue on AI and digital health. I invited experts in the field to share their knowledge and educate us on these pressing topics. In this issue, you will find everything from the basic concepts, including AI, digital health, machine learning, Natural Language Processing, mHealth, and blockchain, to the different ways these concepts are being integrated into the daily work of medical writers.

Nikolaos Parisis discusses the critical role medical writers play in AI-driven healthcare industry, describes how AI can empower medical writers in various domains (regulatory, medical affairs, redaction, and publishing), and highlights the importance of staying up to date with the AI world. Jackie Johnson and Sean Manion take this to the next level, discussing the implications of blockchain in healthcare, research, and scientific publishing and highlighting blockchain-related projects that are relevant to medical writers. Sonia Costa integrates AI and machine learning, the fast-growing area of Natural Language Processing-based tools and discusses the impact of these technologies in medical writing; and she proposes that we medical writers embrace this new friendship with AI. Yan Zhou also looks at things from a positive perspective: he offers a view of drug development and medical writing in the digital world and the possibilities for medical writers to explore wider career pathways. Continuing on this theme of the advantages of AI, Kelly Goodwin Burri explains how AI can be used to optimise searches and streamline the review process for systemic literature reviews of medical devices.

Finally, two articles address regulations and standards around AI and digital health. Theresa Jeary, Karin Schulze, and David Restuccia share what medical writers need to know about regulatory approval of mHealth and digital healthcare devices in the EU and globally; and Katharina Klesper and Jürgen Zerth discuss the impact of digitalisation within the healthcare sector and how good practice standards in medical writing may help to convey digital health contexts for a wide range of target groups.

In closing, I want to thank Martin Delahunty, director of Inspiring STEM Consulting, for sharing his expertise and knowledge that helped put together this issue. He also nicely set the stage for this issue with his article in our last issue: Artificial intelligence – will we be replaced by robots?¹

I hope you enjoy reading this issue as much as the whole editorial team enjoyed working on it. Together, we invite you to join us in this fourth industrial revolution.

References