INNOVATING HEALTHCARE PRACTICES: THE ROLE OF ARTIFICIAL INTELLIGENCE AND INTERNET OF MEDICAL THINGS

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Purpose – Healthcare is one of the recent service research priorities (Ostrom et al. 2015). Service scholars have addressed co-creation practices in health (McColl-Kennedy et al., 2015, Frow et al., 2016). Few studies analyses how smart technologies and digital devices are impacting on resource integration and value co-creation in the healthcare ecosystem. Artificial Intelligence (AI) and the Internet of Medical Things (IoMT) seem to enable access to the healthcare data, when and where needed. However, little is still known about how AI and IoMT are innovating healthcare practices in the wider actor to actor (ecosystem) view. This paper aims to investigate the contribution of AI and IoMT in innovating healthcare practices in the healthcare ecosystem.

Methodology – This study adopts multiple case studies to understand the nature of care practices and how they are changing. The investigation involves multiple, purposefully selected actors that are followed by a qualitative research approach, pursuing detailed and rich data collections to explicate complex issues and advance extant knowledge (Dubois and Gadde, 2002; Gummesson, 2005).

Findings – The use of A.I. and IoMT encourages fresh care practices and helps actors with a proactive management healthy lifestyle. Three healthcare practices have been identified: keeping well, taking care and maintaining autonomy. 'Keeping well practices' refer to individuals in control of their health and lifestyle, where A.I. based solution can support different actors in performing routine tasks such as taking vital signs, analyzing it and prompting for care. 'Taking care practices' concern actors with personalized and data-driven medical service. A.I. helps to understand the day-to-day patterns and needs of the individual. 'Maintaining autonomy practices' relate to ageing individuals, where A.I. based solutions can support them to become independent and maintain social connections.

Originality/value – This study offers an original contribution in addressing how AI and IoMT are innovating the healthcare ecosystem.

Key words (max 5): Digital Healthcare, Healthcare ecosystem, AI, IoMT

Paper type – Research paper