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ePortfolio use: a state-of-the-art review in 8 undergraduate healthcare educational programs

Background and aim(s) – EPortfolios have attained an established position in healthcare education and studies exploring the use of ePortfolios increased exponentially. However, a comprehensive, interdisciplinary overview of the literature is lacking. This review aims at developing a benchmark about ePortfolio use in undergraduate healthcare education to help optimizing future ePortfolio practices.

Methods - A state-of-the-art-review was conducted about the use of ePortfolios in audiology, dental hygiene, midwifery, nursing (bachelor and associate degree), occupational therapy, podiatry and speech therapy. A systematic search strategy of eight literature databases was adopted to track literature about ePortfolio use in educational as well as workplace learning settings. Undergraduate educational programs were included while non-English texts, book sections, news articles and literature within

medical and postgraduate educational contexts were excluded. We identified 8 major themes to structure the data: terminology, samples, contexts, objectives, ePortfolio-platforms, advantages, challenges and recommendations.

Results – Thirty-seven of the 384 analysed articles were included. Samples mostly involved students, both in educational and workplace learning contexts. Studies often explored students' perceptions and satisfaction, outlined characteristics of successful ePortfolio use, overviewed challenges adopting ePortfolios and evaluated ePortfolio implementation. There were no studies investigating the effect on quality of patient care. Remarkably, advantages of ePortfolios put forward in one study were sometimes entitled as challenges in other studies, possibly caused by using different ePortfolio-platforms aiming different objectives, for example feedback or accreditation. Finally, we overviewed reported recommendations e.g. integrate artificial intelligence; use ePortfolios to support lifelong learning besides assessment.

Conclusions and recommendations – This first interdisciplinary review might help ePortfolios to optimize future ePortfolio practices, provided that future research considers recommendations, involves all ePortfolio-users and focuses on quality of patient care.

Key words - ePortfolio, undergraduate healthcare education, review

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