

Abstract

The purpose of this study is to develop and validate a digital health model that ensures equitable access to Universal Health Coverage in Kenya. Universal Health Coverage, as defined by the World Health Organization under Sustainable Development Goal 3.8.1, promises accessible healthcare for all, yet inequalities in health access persist. This study addresses the gap in sustainable and efficient digital health models that promote equitable access to health, particularly in developing economies like Kenya. The study adopts a positivist philosophical paradigm and utilizes a deductive approach to theory development, employing a quantitative methodology. Data was collected using a structured questionnaire with closed-ended questions in Makueni County, Kenya between the period of 1st July 2024 and 1st October 2024. Multiple regression analysis, with a 95% confidence interval, was employed to test the significance of the relationships between variables and to evaluate the hypotheses. The study's findings indicate that digital health interventions, which include information systems, services, programmes, digital health tools and technologies, positively influence equitable access to Universal Health Coverage. The major contribution of this study is in the development and validation of a digital health model to guide the implementation of equitable health access strategies in Kenya and similar developing economies, ensuring progress toward Universal Health Coverage.