

# **A FRAMEWORK FOR PERFORMANCE EVALUATION OF ELECTRONIC HEALTH INFORMATION SYSTEMS**

## **Abstract**

eHealth Information Systems (ISs) deliver several benefits to healthcare providers and patients in developing economies. However, a high failure rate of eHealth ISs has been recorded due to: lack of eHealth readiness assessment, limited funding, inadequate infrastructure, deficiency of skilled personnel to support the initiatives, failure of acceptance, poor communication of available information and lack of evaluation of eHealth ISs. The implementation of eHealth ISs involves high capital, operational costs and risks that affect their potential. Thus, continuous evaluation of these systems is required to ensure that they achieve the intended goals and purpose. However, evaluation of eHealth ISs is not considered an essential activity and is given minimal attention. Therefore, this study aimed at developing a framework to support evaluation of the performance of eHealth ISs as a means to increase chances for successful implementation. To achieve this, the research was guided by the pragmatic philosophy, abductive approach, mixed-methods research and participatory action research methodology. Major outputs include: a framework showing the orchestration of factors for evaluating the performance of eHealth ISs and supporting elements or mechanisms for realizing those factors; a performance evaluation checklist for eHealth ISs; and a corresponding prototype. In conclusion, findings from evaluation of results indicate understandability of the designed framework, applicability and functionality of its corresponding application. Thus, the need for adoption of mechanisms to support performance evaluation of available and future eHealth ISs initiatives. In addition, we recommend for customization and validation of the framework to inform performance evaluation of eHealth ISs in developing economies.