

Publication

The complexity of scaling up an mHealth intervention: the case of SMS for Life in Tanzania from a health systems integration perspective

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 4646127**Author(s)** Sant Fruchtmann, C.; Mbuyita, S.; Mwanyika-Sando, M.; Braun, M.; de Savigny, D.; Cobos Muñoz, D.**Author(s) at UniBasel** [Sant Fruchtmann, Carmen](#) ; [de Savigny, Donald](#) ; [Cobos Muñoz, Daniel](#) ;**Year** 2021**Title** The complexity of scaling up an mHealth intervention: the case of SMS for Life in Tanzania from a health systems integration perspective**Journal** BMC Health Serv Res**Volume** 21**Number** 1**Pages / Article-Number** 343**Keywords** Case study; Digital health; Scale-up; Systems thinking**Mesh terms** Antimalarials; Humans; Qualitative Research; Systems Integration; Tanzania; Telemedicine

BACKGROUND: SMS for Life was one of the earliest large-scale implementations of mHealth innovations worldwide. Its goal was to increase visibility to antimalarial stock-outs through the use of SMS technology. The objective of this case study was to show the multiple innovations that SMS for Life brought to the Tanzanian public health sector and to discuss the challenges of scaling up that led to its discontinuation from a health systems perspective. **METHODS:** A qualitative case-study approach was used. This included a literature review, a document review of 61 project documents, a timeline of key events and the collection and analysis of 28 interviews with key stakeholders involved in or affected by the SMS for Life programme. Data collection was informed by the health system building blocks. We then carried out a thematic analysis using the WHO mHealth Assessment and Planning for Scale (MAPS) Toolkit as a framework. This served to identify the key reasons for the discontinuation of the programme. **RESULTS:** SMS for Life was reliable at scale and raised awareness of stock-outs with real-time monitoring. However, it was discontinued in 2015 after 4 years of a national rollout. The main reasons identified for the discontinuation were the programme's failure to adapt to the continuous changes in Tanzania's health system, the focus on stock-outs rather than ensuring appropriate stock management, and that it was perceived as costly by policy-makers. Despite its discontinuation, SMS for Life, together with co-existing technologies, triggered the development of the capacity to accommodate and integrate future technologies in the health system. **CONCLUSION:** This study shows the importance of engaging appropriate stakeholders from the outset, understanding and designing system-responsive interventions appropriately when scaling up and ensuring value to a broad range of health system actors. These shortcomings are common among digital health solutions and need to be better addressed in future implementations.

ISSN/ISBN 1472-6963 (Electronic)1472-6963 (Linking)**URL** <https://doi.org/10.1186/s12913-021-06285-8>**edoc-URL** <https://edoc.unibas.ch/89360/>**Full Text on edoc** Available;**Digital Object Identifier DOI** 10.1186/s12913-021-06285-8**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/33853601>**ISI-Number** WOS:000640518800008

