

MomConnect: an exemplar implementation of the Health Normative Standards Framework in South Africa

Christopher Seebregts^{i,ii} Peter B arronⁱⁱⁱ
Gaurang Tanna^{iv} Peter B enjamin^v
Thomas Fogwill^{vi}

Abstract

In August 2014, the National Department of Health implemented MomConnect as a national digital maternal health program that implements the South African mobile health (mHealth) strategy and the National Health Normative Standards Framework for Interoperability in electronic health (eHealth). As the first digital health program communicating with people at scale, MomConnect enrolled more than half a million women from all regions of the country in the first year of operation, representing approximately half the number of pregnancies in the public health sector. MomConnect uses a mobile phone application to support a pregnancy registration system in antenatal care facilities, allowing pregnant women to receive stage-based messages to help them improve their health and that of their babies. Women can self-subscribe or be subscribed by community health workers to receive a limited set of health-promotion messages. Registered users interact with the system by rating the service received, asking questions, and submitting compliments or complaints. The mobile system connects to a central health-information exchange that facilitates interoperability between digital health applications and includes data validation, a national pregnancy registry and a monitoring and reporting system. Used throughout the health system at facility level, MomConnect has generated a national register of pregnant individuals and set up a national feedback system to clients. As such, it is an exemplar implementation of the Health Normative Standards Framework enabling national-level innovation as a model for future health system strengthening, enabling interoperability between digital health applications, and achieving universal health coverage. MomConnect has drawn global attention due to its innovative features and its avoidance of many of the common pitfalls when implementing digital health projects at scale in low-resource settings. This chapter focuses on the design and development of the technical infrastructure supporting MomConnect.