

# PhD defence Ibukun-Oluwa Omolade Abejirinde

## Diagnostic and clinical decision support systems for antenatal care: is mHealth the future in low-resource settings?

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Dit is de omschrijving

### Supervisors:

- Prof. Dr. J.J.M. van Roosmalen (VU Amsterdam)
- Prof. Dr. M.B.M. Zweekhorst (VU Amsterdam)
- Dr. Azucena Bardaji Alonso (ISGlobal, Hospital Clínic - Universitat de Barcelona)
- Prof. Em. Vincent de Brouwere (ITM)

### Summary:

Socially, ethically and clinically, pregnant women represent a vulnerable group and up to 75% of maternal deaths are due to preventable or manageable conditions and over 90% of maternal deaths occur in low- and middle-income countries (LMICs). An increasingly important proportion of maternal mortality in LMICs is due to indirect or non-obstetric causes including HIV-related complications, anaemia and malaria. Antenatal care (ANC) is an important part of the maternal care continuum because it is often the first contact of pregnant women with health services and offers an opportunity for prevention and early detection of pregnancy complications, with referral where needed. Evidence shows that quality ANC has direct and indirect impacts on reducing maternal and perinatal morbidity and mortality and can therefore contribute to realising the aims of the third sustainable development goal (SDG) on maternal health. *But which strategies could be leveraged to*

*improve the quality of antenatal care in low-resource settings?*

The use of digital innovations in health (i.e. mHealth) is fast gaining popularity and support for leapfrogging persistent health system barriers to provide quality care in low-resource settings. However, there are pertinent questions about if and how mHealth addresses the pressing challenges of quality antenatal care in low-resource settings. In partnership with five Dutch and two Ghanaian organisations, this thesis aimed to gain insight on the effect of digital innovations, specifically clinical decision support devices on the quality of ANC in low-resource settings, and its implications for practice. Findings are important for revealing the theoretical underpinnings of mHealth use, and to inform mHealth implementation research, its uptake by health system actors and its translation to practice for the delivery of quality antenatal care in low-resource settings.