

## OP-02-MTS

### DIGITALIZING THE PREGNANCY RECORD

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**Background:** Pregnancy requires extensive medical care due to various physical and psychological changes, making thorough antenatal care and record-keeping essential for the health of both mother and fetus. To overcome the inefficiencies, inaccessibility, and lack of real-time monitoring in paper-based systems, digitalizing pregnancy records can greatly enhance the quality and efficiency of antenatal care.

**Methodology:** We undertook a multi-phase approach to examine the shift from traditional paper-based to digital pregnancy records. This process began with a thorough literature review to understand the current state of pregnancy records within Sri Lanka. Following this, we observed antenatal wards to assess the pregnancy records maintained for expectant mothers. By collaborating with healthcare professionals, particularly doctors, we identified the key components of these records suitable for digitalization. Additionally, we evaluated the technological infrastructure of Sri Lankan hospitals to recommend an appropriate digital platform for accessing the health information of both the expectant mother and her fetus.

**Deliverables:** Data privacy, security, and ease of integration with current hospital systems were important factors that we took into consideration. We designed a user interface and database to digitalize the pregnancy records with relevant variables to ensure that the data collected is comprehensive.

**Conclusion:** Digitized pregnancy records offer expectant mothers convenient access to their health information through secure online portals, eliminating the need for paper documents during appointments. This accessibility increases patient involvement and ensures healthcare providers have immediate access to essential information about the mother and fetus. Future enhancements aim to include medication and supplement tracking, alongside integration with wearable devices for continuous monitoring of the mother's vital signs. These advancements will provide comprehensive, real-time health insights throughout pregnancy.

**Keywords:** Pregnancy record, Digital platform, Data privacy