



## The Sensor TB Application As a Monitoring Tool For Tuberculosis Patients to Support Tuberculosis Control Program

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### ABSTRACT

**Background:** Tuberculosis (TB) cases are still found mainly in developing countries, including Indonesia. The large number of TB patients found in the Sukoharjo Regency area has led to a risk of transmission to the community, and there is no application that facilitates monitoring the location and condition of TB-positive patients, resulting in patients discontinuing treatment or being lost to follow-up, which hinders the Tuberculosis Control Program.

**Purpose:** To address this challenge, the purpose of this study was to develop a TB Sensor Application that supports the Tuberculosis Control Program, offering benefits for TB patients and facilitating the monitoring of tuberculosis cases.

**Method :** This research was the mixed-method method. In addition, the system development life cycle (SDLC) approach was conducted to support it. The observational and in-depth interview was obtained to measure more information about TB sensor and technology acceptance model (TAM) approach was undertaken on this process.

**Results:** The Sensatis application is a Sensor-TB application used to monitor the activities of tuberculosis patients who use smartwatches, providing clinical data and data captured via mobile phones or computers that can be accessed by TB officers and the Health Office.

**Conclusion:** In conclusion, the implementation of the TB Sensor application is anticipated to strengthen the monitoring of TB patients throughout Indonesia, contributing to the achievement of the End TB 2030 goal.

### Keywords:

*Application, Sensor-TB, tuberculosis, monitoring*