First-of-its-kind AI-based app to detect active TB cases within seconds

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Salcit Technologies is piloting Swaasa - an AI-led solution that can revolutionise the detection and early treatment of tuberculosis in India

India Health Fund, a Tata Trusts initiative, is collaborating with ACT, a non-profit venture philanthropy platform, to support Hyderabad-based startup Salcit Technologies in piloting Swaasa - an artificial intelligence (AI)-led solution that can revolutionise the detection and early treatment of tuberculosis in India.

India Health Fund and ACT For Health will co-fund the development of Swaasa - an AI platform by Salcit Technologies that record cough sounds from suspected TB patients using a phone's microphone and analyses them to decode unique cough signatures to detect the possible presence of pulmonary tuberculosis using a proprietary AI algorithm and give a report in just a few seconds.

The grant by IHF and ACT For Health will aid Salcit Technologies in the technical validation of the Swaasa's AI algorithm - the six-month-long project will include the collection of cough sounds from about 5700 subjects (TB and Non-TB), the technical validation of the platform across 6 public health centres and the enhancement of the platform to reach an accuracy of 90% for detecting the likely presence of TB.

Unlike other cough screening algorithms coming to the market, Swaasa is a multi-focus platform that can be used for screening of various lung ailments including Covid-19, for which it is currently undergoing clinical trials. Swaasa is also registered with Central Drugs Standard Control Organisation (CDSCO), is HIPAA and ISO27001 certified and has two granted patents and three publications backing its technology and use.

Salcit's proprietary combination of audiometric analysis and AI technology will undergo two more development phases post the review of the first phase by an external panel of technical experts representing Central TB Division, ICMR and WHO-India, among others.