

INTRODUCTION

With the Union Health Ministry announcing new guidelines for the home isolation of people who either have very mild COVID-19 symptoms or are in the pre-symptomatic phase, it will now be a mammoth task for authorities to monitor their health status and also ensure they do not violate home quarantine norms.

The device [a smartwatch] can measure various vital parameters of individuals under isolation on a real-time basis. Linked to a smartphone via Bluetooth, the smartwatch will record the patient's blood oxygen saturation and body temperature in real time. The device is suitable for those under isolation and also for asymptomatic COVID-19 positive patients.

The location details will help ensure that the individual is adhering to quarantine norms. A warning can be sent to authorities if the user crosses over from one zone to another.

Also, if the temperature rises or the oxygen saturation level falls below 93%, the wearable device alerts the local tracking centre about the impending need for hospitalisation

These readings are then automatically uploaded to an Android application [via Bluetooth] which can be accessed by clinicians or the Health Department. When there is an increase in the body temperature or a drop in the oxygen saturation level, beyond admissible limits, the health officials can be alerted through an SMS,” he said. “Using this device, people can be monitored even in their homes and thus we can save hospitals for the critical patients.