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India's Amrita University launches wearable device for home monitoring of glucose and BP

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Patients can use the wearable, non-invasive device to measure six body parameters including blood glucose, blood pressure, heart rate, blood oxygen, respiratory rate and 6-lead ECG, from the comfort of their home

Amrita University has developed a device for home-monitoring of glucose and blood pressure. Amrita Spandanam, as the device is called, will be sold online and through pharmacists across the country.

Developed and patented by the varsity's Centre for Wireless Networks and Applications, it is a wearable, six-in-one device that is an excellent replacement for a bedside monitor. It can be used to measure six body parameters including blood glucose, blood pressure, heart rate, blood oxygen, respiratory rate, and 6-lead ECG.

Amrita Spandanam is connected to the patient's smartphone. The data is sent to a secure hospital cloud which enables any doctor authorized by the patient to access the vital parameters remotely from any location. The product also integrates multiple -learning models that can predict the potential deterioration of patients' health and provide early warning decision support to doctors for acute hypotensive episodes, sepsis, sleep apnea, and atrial fibrillation.

Said **Dr Maneesha V Ramesh**, Prof. of Amrita University who led the team of researchers: "Amrita Spandanam is a revolutionary device that has bagged several US patents, with results published in top scientific journals. It offers a quick, easy, affordable and non-invasive way to monitor and detect diabetes, cardiovascular diseases, hypertension, sleep apnea and allergy attacks from the comfort of one's home. The product was extensively tested on 1000 patients at Amrita Hospital in Kochi and various remote clinics in Kerala. Last year, these devices were successfully deployed at Amrita Hospital to remotely monitor the progression of severity in COVID-19 patients."