

Proposal for a universal access solution to care in rural areas: case of Senegal

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Abstract— This article proposes a system of universal access to quality and low cost care based on sensors for the continuous monitoring of physiological parameters. Surveillance is essential for patients with chronic diseases such as high blood pressure (hbp) with a mortality rate of 24% in the country and diabetes in rural areas of Senegal lacking medical specialists.

A micro-computer system based on raspberry pi is used. Nurses in rural areas can use to collect biometric information captured by sensors such as high blood pressure, blood sugar, electrocardiogram (ECG) and body temperature of the patient. If one of the patient's biometric parameters exceeds normal, the nurse sends a message to a specialist physician in their area.

Keywords— ECG, hbp, Raspberry Pi, ADIE, e-Health



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