

New challenges in metrology for health: Looking for reliable diagnosis in electrocardiography and blood pressure measurement

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Abstract-

Improving awareness of the importance of measurements in the field of health is one of the objectives of the Spanish Metrology Centre (CEM). To achieve this, a health metrology laboratory has been set up to develop projects focused on ensuring the reliability of measurements in equipment such as electrocardiographs (ECGs) and sphygmomanometers. The laboratory's diverse equipment includes vital signs simulators, signal generators, oscilloscopes, multimeters and software such as Python®. These tools have enabled the analysis of simulated ECG reference signal models and the identification of appropriate equipment for sphygmomanometer calibration.

Index Terms- Electrocardiography; Sphygmomanometers; Health; International-comparability; CEM; Metrology

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