Oscillometric blood pressure measurement

Country of origin | Switzerland

Health problem addressed

Pre-eclampsia and eclampsia is the second cause of maternal death (10-15% of all maternal deaths) in low and middle income countries.

Product description

This device provides automated oscillometric blood pressure measurement. It measures the mean arterial pressure by which the systolic and diastolic blood pressure are then calculated using an algorithm.

Developer's claims of products benefits

The device is accurate in identifying pre-eclampsia and requires limited training. Studies have shown that it is user-friendly and leads to better adherence to measurement at home.

Suitability for low-resource settings

The device only requires batteries and has been validated for use among pregnant women and women with pre-eclampsia. In addition, cuffs are available in S, M, L, L-XL sizes in both resusable and disposable varieties.

Operating steps

Place the cuff on the upper arm, press the on/off button and the device automatically measures blood pressure and presents the measured blood pressure value on the LCD screen.

Regulatory status

The device is both FDA approved and CE marked.

Future work and challenges

Challenges include making doctors and nurses aware that this device is an automated oscillometric device that can reliably measure pregnant women with high blood pressure and pre-eclampsia and that patients can screen themselves at home with this device.

Use and maintenance

User: Self-use/patient, physician, nurse, midwife, technician

Training: Only in the case of patient self-use. Training can be provided by the midwife, nurse or physician

Maintenance: None

Environment of use

Settings: Rural, urban settings, ambulatory, at home, primary (health post, health center), secondary (general hospital), tertiary (specialized hospital)

Requirements: The device can work on batteries but also with an adapter and electricity. When the user has access to a PC, the device can be used as a telemedicine device and the data uploaded to the PC and transferred via the internet to a hospital or general practitioner. However, this is optional. Ambient temperature for device storage and use should be between 10 and 40 degreees Celsius.

Product specifications

Dimensions (mm): 150 x 100 x 50

Weight (kg): 0.385

Consumables: None

Life time: 5 years

Shelf life: 10 years

Retail Price (USD): 110

Other features: Software use, portable, capital equipment, telemedicine solution

Year of commercialization: 2008

Currently sold in: All of Europe (except for some Eastern European countries), Canada, United States and many countries in Asia

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