



Position statement on the replacement of mercury sphygmomanometers

**High Blood Pressure Research Council of Australia
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Mercury sphygmomanometers are intrinsically accurate when properly maintained but are being gradually withdrawn due to the occupational health and safety concerns regarding this toxic material in its manufacture, use and disposal. This process has already begun in the European Union.¹ Existing non-mercury aneroid machines will not be affected by this development.

The major change in clinical practice is likely to be an increase of the use of automated and semi-automated electronic devices replacing the older mechanical devices. These new devices have varying evidence of reliability, validity, and accuracy and therefore it is important that any machine should meet the relevant instrument standards.^{2,3} They also have the potential for beneficial consequences in hypertension management in the clinical practice setting including:

- a) automated multiple measurement and averaging,
- b) a reduction in digit preference and other forms of observer error⁴,
- c) good acceptance in clinical practice as it allows multitasking, i.e. the clinician can do another task while the blood pressure is being recorded,
- d) good acceptance by patients, as these machines are easier to use for home monitoring.

Where validated automated and semi-automated electronic devices are employed they should be maintained and calibrated regularly according to the recommendations of manufacturers and service agents.¹

References

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