



Scales used in the practice of medicine

All scales used in the practice of medicine should be sufficiently accurate to ensure that the risk to patients is kept to a minimum; this will cover scales used to calculate medication dosages, diagnose illness, monitor treatment and assess nutritional status.

If scales used for this purpose are not accurate, patients could be put at risk and hospitals could be liable for any injuries that result. This will be particularly crucial in those high-risk fields such as paediatrics.

These concerns were first brought to the public's attention with the investigation into the accuracy of scales used in medical weighing conducted by Trading Standards Departments. This showed that weighing equipment used in healthcare premises may be inaccurate, inappropriate or not used correctly, leading to potential errors in diagnosis, treatment or medication of patients.

The National Health Service recognized the inherent risk of not having correctly calibrated scales and published an alert stressing the significance of having scales calibrated appropriately and regularly, making steps to reduce the risks to all patients.

The tests should include the following to ensure that all risks associated with weighing patients are kept to a minimum:

- A calibration test at a minimum of five load points up to 10% above the normal weighing range. This should include testing in both increasing and decreasing loads as it is often possible to get different results in each circumstance.
- The instrument should have loads placed around each corner. If this is not possible, other off centre loading should take place. This is to ensure that it will be accurate if used in this condition.
- It is always recommended that a repeatability test, in which loads are placed on and off the instrument a number of times, be carried out at around 50% of the maximum capacity.

These should be seen as the minimum tests necessary to ensure that the users can be confident in the results used in any clinical procedures or decisions.

If fewer tests than this are carried out the confidence in the results will open to greater doubt and potential challenge.

If you would like to discuss this further please contact:

Ian Turner

07581-499244

technical2@ukwf.org.uk