CPD Questions:

1. **A laboratory error is a QC result outside the range of +/- 2 SDs.**
   A) True
   B) False
2. **The least errors occur in,**
   A) Getting the right sample to the bench,
   B) Analysing the sample,
   C) Delivering the right report back to the ward or clinic.

This graph shows that the use and practice of QC actually works. Analysis is not easy and yet that aspect has the least errors – simply because QC works.

The errors are mostly seen in the pre-analytical aspect of laboratory sample handling because that is the most labour intensive and least automated and least controlled aspect of a laboratory's work. That department is still largely a manual one, with packages of samples and forms arriving all day long, to be labeled, centrifuged, logged and then passed onto the analytical department. The possibility of error, human error, is higher there than anywhere else in the lab. It is also worth pointing out that the staff there are most likely the least trained, and the least trained and perhaps also paid the least!

An Acceptable Percentage of Errors?

We come to the thorny issue of what percentage of errors is acceptable? You may say: none at all, if you are still an idealist after years of experience. Or you may appreciate that variation is inevitable and thus errors are also inevitable. But the question remains: what percentage of errors is acceptable? My own position is that the percentage of errors that you as a laboratory professional would accept is that which you would be willing to accept for your own samples or those of your family being run through your laboratory.

Well, if we go back to Module 1, you will see that we accept different variations for different tests. If you add that fact to the above graph showing where we have most errors, then you will have to accept that every lab – including your own – makes errors. In other words, your lab will send wrong results back to a patient, now and then.

It is not possible to state that a certain percentage of errors is "acceptable". We as professionals should always be striving for better performance for our patient samples, through a variety of preventative measures to be discussed shortly.

What is certain is the old adage: if you don't measure it, you can't improve it. In other words, if you don't know what you do wrong, you'll never get any better, In this context, I strongly recommend yet another document, perhaps the most important one you will ever create: the Customer Complaint file. In there you must document all complaints coming back to you, whether sensible or not, in your opinion. Document them all, discuss them with your staff, communicate with every single person making a complaint and then analyse what your file tells you. I will predict that most of your complaints will be cries