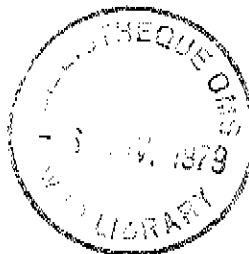




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GENERAL SITUATION OF QUALITY CONTROL PROGRAMMES
AND THEIR DEVELOPMENT IN THE EUROPEAN REGION

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Internal quality control techniques are now probably part of everyday clinical chemistry practice in the majority of laboratories providing a routine service in Europe. Such techniques usually involve the simultaneous analysis of control materials at the same time that patient material is analysed.

The use of the same control material over a period of time produces sets of values from which the accuracy and precision of a particular determination can be assessed. It is important to differentiate between these two types of variation in results because they are independent variables.

There is considerable agreement among laboratories that the Levy-Jennings type of control chart is the most useful way of displaying control. Once a method is in reasonable control in respect to precision and accuracy, or where there is a great variation in results, then changes in accuracy, even of small magnitude, can be monitored by Cusum diagrams.

The use of computers to interpret quality control data and reduce data production by "exception" reporting is in use in only a few laboratories.

The use of external quality control surveys, an essential adjunct to internal quality control techniques, is a common practice in both eastern and western Europe. In such surveys, portions of the same material are sent from the organizing agency to the participating laboratories where the analyses being surveyed are performed. The results are returned to the organizing agency, where they are collated and compared with each other and sometimes with values produced by reference laboratories.

Most centres use the surveys to assess the performance of individual laboratories, but there is variation in approach from country to country. Probably the greatest divergence is between those which use the surveys to decide whether a laboratory should practise, and those which are run by professional groups mainly for the education of participating laboratories. The wide range of approach will be illustrated with examples.

The use of external quality control surveys to assess the state of the art in a particular country and the improvement of the state of the art with time will be illustrated.

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