achieved. Differences in either may support use of different QC procedures as being more appropriate in other laboratories. The general design approach, however, is applicable in all laboratories, to all instrument systems, and to all analytes, and will lead to selection of control rules and numbers of measurements that are appropriate for each test in that laboratory.

The approach we outline here depends on the availability and proper application of power-function graphs. An even more practical development of cost-effective QC is available through simplification of the design approach by use of "quality-control selection grids" (*8*). These QC selection grids are 3 × 3 tables that identify QC procedures having error-detection and false-rejection characteristics appropriate for measurement procedures with different values of ΔSE_c and with different frequencies of occurrence of those errors. The grids should provide a practical planning tool that can be used in any service laboratory.

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