
QC Validator 2.0 (Westgard Quality Corp., Ogunquit, ME) is a Windows application that facilitates rational selection of quality-control (QC) rules. The user provides the performance characteristics of the analytical system (imprecision, inaccuracy, etc.) and the analytical or clinical goal (total allowable error). The program displays performance characteristics—in the form of OPSpecs charts, critical error graphs, and power function graphs—for various sets of QC rules. Optionally, the program also automatically chooses a set of control rules on the basis of user-defined selection criteria. Users should be aware that the performance characteristics reflect the particular manner in which the program implements QC rules. The user will need to consult literature references (provided in the program manual) or the author’s web site (http://www.westgard.com/) for details. Most users will want to visit the web site anyway; it contains tutorials and other valuable information.

I installed and ran QC Validator on all three Windows platforms (Windows 3.x, Windows 95, and Windows NT). All operations proceeded smoothly. The program has the look and feel of a genuine Windows application; thus, experienced Windows users will learn the program very quickly. I was happy to see that the program provides readily-accessible utilities to export graphics as Windows metafiles (*.wmf), and to add free-text comments to reports.

The program’s user interface, however, could use some finishing touches. I would reorganize some of the menus. For example: the “Parameters”, “OPSpecs Charts”, “Critical error Graphs”, and “power function graphs” items (in the current “Options” menu) and a renamed “Report” item (currently the “Generate new report” item in the “Report” menu) should be grouped together in a new “View” menu, and there should be a check mark next to the current selection, i.e., the view currently shown in the main window. When the “Report” view is active, the “Export Graphic” command (under the “File” menu) should be dimmed (because nothing happens when the user selects this command). Finally, the program could handle more gracefully the situation in which the user selects “Print Preview” without a printer installed on the system: Currently, a system error occurs and the program aborts.

QC Validator is an excellent tool for optimizing QC rules for an individual analyte; for evaluating whether established QC rules are adequate for a particular analyte; and for teaching residents, technologists, and students about QC. Users who want to have one uniform set of QC rules for all analytes in the laboratory will opt to evaluate that set of rules for each of the laboratory’s analytes. To optimize QC for each individual analyte, the user must be willing to have different rules for each analyte. Most laboratories will benefit from a critical evaluation of their QC rules because poor QC procedures may cause poor analytical performance—and consequently proficiency test failures, physician complaints, etc.

Overall, I enjoyed using QC Validator. It is an indispensable tool for sophisticated users who want to take an academic approach to QC.

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