

Essential Steps of the Postanalytic System Infographic

The postanalytic system is the final system of the Total Testing Process. Activities in this system include analyzing testing data and reporting test results. The postanalytic system begins in the laboratory setting and ends in the patient care setting. Common challenges for this system are Clinicians not retrieving test results or misinterpreting test results.

1. Data Analysis

The data analysis step occurs when data is processed to determine a test result. The laboratory must ensure that test results and other patient-specific data are reported accurately, reliably, and in a timely manner.



2. Laboratory Interpretation and Reporting

The reporting step is where the laboratory provides the results of the testing. Test report preparation is an important step in the postanalytic activities. Laboratories have a responsibility to conduct test report preparation to help ensure accurate and timely result reporting.

Test results are commonly entered into an electronic reporting system such as a laboratory information system. Once entered, these test results are then transmitted to the clinician and appropriate clinical care teams.

When any test result indicates an imminently life-threatening condition, or panic or alert values as determined by medical and laboratory directors, the laboratory should immediately alert the individual or entity requesting the test based on predefined criteria established by the healthcare system. The individual responsible for using the test results should also be alerted. The laboratory should then document who was informed about the result and the date and time of the contact.



When the laboratory cannot report patient test results within its established time frames, the laboratory should determine, based on the urgency of the patient test(s) requested, the need to notify the appropriate individual(s) of the delayed testing.