Results of National Cytology Proficiency Testing - January through Sept 16, 2005

The Clinical Laboratory Improvement Amendments of 1988 (CLIA) was enacted by Congress to ensure the quality of laboratory testing in the United States and to protect and enhance the public health of its citizens. Passage of the law was the result of Congressional investigations showing that misread Pap smears had resulted in the deaths of a number of women.

One part of the law requires periodic proficiency testing (PT) of individuals who perform screening of Pap smears. The test assesses their cytology proficiency in locating and identifying abnormal cellular changes that may indicate infection and/or malignancy. The State of Maryland received CMS approval for its state-wide cytology PT program (in 1994) and the Midwest Institute for Medical Education (MIME) received CMS approval in 2004 for its nationwide cytology PT program. An additional nationwide cytology PT program was approved to begin in 2006 (the College of American Pathologists (CAP)). The value of cytology proficiency testing is indicated by the testing results so far and by the cooperation of laboratories throughout the country to ensure that their staff have demonstrated competency through such testing.

Individuals who are subject to cytology proficiency testing are offered 4 continuous opportunities to be tested (the initial test, plus 3 subsequent opportunities if they fail the first test). Approximately 6,147 proficiency tests were conducted in the national testing effort during the first nine months of 2005. The graph below shows the percentage of people who failed the first test in the testing conducted so far in 2005.

The first bar indicates the first-test failure rate for the 3,107 cytotechnologists who have been tested so far. Cytotechnologists perform the vast preponderance of Pap smear screenings. The failure rate of 9% is of concern, but quickly improves to less than 3% after the second test (second test is not shown).

The second bar shows the failure rate for pathologists working without cytotechnologists. While the number of pathologists who work without cytotechnologists is relatively small (with 274 tested so far), the 41% failure rate is particularly noteworthy. After the second test the failure rate is 32%, still very high but in the right direction, as the educational value of testing shows its effect.

The third bar shows the failure rate for pathologists who review Pap smears after a cytotechnologist has first reviewed the smear. About 2,766 such pathologists have been tested so far, with a first-test failure rate of 13%.