Moreover, they say, the marketing and publicity surrounding new technologies could be frightening women by over-emphasizing the significance of false negative Pap tests and undermining their faith in routine testing.

"The biggest reason for a false negative is not having a Pap test," said Victor Savino, M.D., chair of public affairs for the College of American Pathologists. The National Cancer Institute's Mark Schiffman, M.D., also expressed concern about marketing that "might prey on the anxieties of the worried well instead of attempting to reach high-risk women."

This month, CAP is launching a public education campaign to promote the importance and reliability of annual Pap tests. A group of cytopathology professional organizations, the Cytopathology Education Consortium, has a similar campaign under way.

Cost Issues

Pathologists also say that the added costs of the new technologies could keep women from getting annual tests. While costs vary, the use of just one new product can add anywhere from a few cents to $50 per test, sometimes doubling the cost of a conventional Pap smear. Third-party reimbursement for conventional Pap testing runs from about $6 (Medicare) to about $40 according to Cytex estimates; average reimbursement is about $17, said Sullivan.

Companies respond to the issue of increased costs by arguing that the new technologies will make it possible to safely increase the intervals between Pap tests. By making the Pap test more accurate, the technologies will eliminate the need for annual testing, said Fred Kostecki, president of National Testing Laboratories, Fenton, Mo. NTL has developed cervicography, a technique that provides magnified "photographic projection slides" of the cervix that are scrutinized by NTL's expert evaluators.

Cytex's Sullivan also argued that ThinPrep could save health care dollars in the long run. Cytex has data showing that its thin-layer slide technique saves money by cutting down on unusable Pap smears and by catching high-risk abnormalities sooner, he said.

NSI, which makes the automated reader Papnet, defends marketing that increases women's awareness of new technologies. Andrew Panagy, NSI's vice president for marketing and sales, said that its focus groups showed that advertising boosted awareness of the importance of screen-

The New Pap Technologies: Where They Stand

Company officials provided the following information about their products:

**AcCell 2000®,** an automated microscope device to aid in examining slides, has been on the market since May 1996. About 100 AcCell systems, made by Accumed International in Manchester, Mass., are in use worldwide.

**AutoPREP® and AutoSCREEN®,** a thin-layer slide preparation method and an automated screener, will go to the FDA for approval "before summer," made by AutoCyte, Inc., in Elon College, N.C.

**Autopap®,** an automated reader made by Neopath in Redmond, Wash., received FDA approval in fall 1995. By the end of 1996, 52 of the devices were in customer hands. Neopath has contracts with each of the three largest laboratories in the United States, and one of them, Smithkline Beecham, has purchased 19 Autopap® readers. Laboratories use the device to select negative slides for rescreening.

**Cervicography®,** developed by National Testing Laboratories in Fenton, Mo., creates enlarged photographs of the cervix to be read by NTL's expert evaluators as an adjunct to Pap testing. Several hundred U.S. physicians use cervicography.

**Papnet®,** an automated reader, received FDA clearance in fall 1995. Neuromedical Systems Inc., Suffern, N.Y., runs a central facility to rescan slides with PapNet, typically at the physician's or patient's request. Customers more than quadrupled to about 200 laboratories at the end of 1996.

**Pathfinder®,** an automated microscope device to aid in examining slides, is made by CompuCyte, Inc., in Cambridge, Mass.; it went on the market about a year ago.

**Speculoscopy**, developed by The Trylon Corp., Torrance, Calif., and distributed through Pharmacia Upjohn, is a magnified visual exam of the cervix using a light at the end of a speculum. The screening test, Pap Plus Speculoscopy®, received FDA clearance in 1995. Its official market launch is this month in six cities.

**ThinPrep®,** a thin-layer slide preparation method, developed by Cytex Corp. in Boxborough, Mass., received FDA approval last year. Cytex had trained about 75 laboratories by the end of 1996 and about 350 instruments were in the field.

— Caroline McNeil