

Costs Associated with Cervical Cancer Screening

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

[Dr. Saraiya] Welcome to this CDC series of audiocasts on cervical cancer screening. I'm your host, Dr. Mona Saraiya, and with me today is Dr. Tom Cox, practicing gynecologist and president of the American Society of Colposcopy and Cervical Pathology. He's going to give us a brief introduction to cervical cancer screening guidelines and HPV DNA testing. Welcome to the show, Dr. Cox.

[Dr. Cox] Thanks, Mona. It is great to be here and thanks for having me.

[Dr. Saraiya] Dr. Cox, there are many guidelines out there on screening. It seems like the guidelines are very similar on when to start screening, but differ significantly on when to stop screening and how often to screen. Let's start with a summary of what the current guidelines say about when to start screening?

[Dr. Cox] All three organizations, including the American Cancer Society, the United States Preventive Services Task Force, and the American College of Obstetricians and Gynecologists agree that cervical screening should begin no sooner than age 21, or three years from first intercourse, whichever occurs earlier.

This is a very important guideline to adhere to because screening young women and adolescents sooner detects very high rates of HPV infection and low-grade cellular changes secondary to HPV that are most often transient. CIN3 is the lesion that we want to detect and treat it before it can progress to cervical cancer. But even if CIN3 were to occur in very young women prior to the onset of cervical screening, the long sojourn to invasion of many years, and often decades, virtually assures safety. Starting too early often results in overmanagement, overtreatment, and attendant harm without benefit.

[Dr. Saraiya] What about when to stop screening?

[Dr. Cox] All three organizations have differences on when to stop screening. The United States Preventive Services Task Force recommends stopping screening at age 65 for women with "adequate prior normal screening" who are otherwise not at high risk for cervical cancer. A definition for what constitutes "high risk for cervical cancer" is not given. ACS recommends stopping screening at age 70 for women having at least three consecutive normal satisfactory Pap results, and no abnormalities, within the last 10 years.

In contrast, ACOG does not provide an age or parameters on when to stop screening, instead preferring to leave it up to the woman and her clinician.

[Dr. Saraiya] I understand that the professional organizations' guidelines also differ on how often to screen. Talk to us about that.

[Dr. Cox] There are significant differences in the guidelines from these three organizations on the frequency of screening. Whereas ACOG recommends annual cervical cytology from the onset of screening, ACS recommends annual screening if conventional cervical cytology and every two years if liquid-based. In contrast, the USPSTF recommends cervical screening at least every three years. Both ACS and ACOG provide the option to extend the screening interval to every two to three years for women age 30 and over if they have had at least three consecutive normal Pap test results. Both also provide the option to extend the screening interval to no more often than every three years for women with a normal Pap result who also test negative for HPV. When the USPSTF recommendations were made in 2002, the review group concluded that the evidence at that time for using HPV testing in primary cervical screening was insufficient to recommend for or against its use.

[Dr. Saraiya] Dr. Cox, the HPV DNA test has been in use for several years now, first as a management tool and now as a cotest in screening. What do you see as its *main* advantage in screening?

[Dr. Cox] The risk of missing a CIN3 or cancer when both the Pap and the HPV test are negative is no more than one to two in a thousand. Additionally, the predictive value of a single HPV test for risk of development of precancer or cancer in the future is much higher than it is for a single cytology. These are the main advantages. For women infrequently screened, this combination provides a much longer margin of safety than the Pap alone. And for women regularly screened, extension of the screening interval to no more often than every three years safely decreases the number of screens in a woman's life. Reducing the number of screens reduces the potential for picking up insignificant transient HPV infections and low-grade Pap abnormalities that may create anxiety and unnecessary procedures.

[Dr. Saraiya] So one of the main advantages to cotesting is extension of screening intervals. What is the primary disadvantage of cotesting?

[Dr. Cox] Cotesting actually would increase the risk of picking up transient insignificant HPV infections if done too often and would add almost no benefit. It is not cost-effective to do cotesting more often than every three years and it could cause patient harm.

[Dr. Saraiya] In today's litigious world, do you think a doctor can be sued if he or she followed the guidelines to screen women having a negative Pap and negative HPV test no more frequently than every three years and let's say an interval cancer developed? Do you think the risk of being sued would be different if the doctor had only conducted a Pap test alone on three-year intervals?

[Dr. Cox] If a woman participates in cervical screening, she expects that she won't get cervical cancer. Unfortunately, although cervical cancer is not common in screened women, it is one of the most common litigations for gynecologists. Traditionally, for laboratories, cytology has been the primary risk for monetary loss through litigation. The increased sensitivity and longer term predictive value of the cotest would tend to suggest that the risk of malpractice would be reduced in comparison with women having only cervical cytology at extended screening intervals.

Additionally, if cytology labs use HPV positivity as a primary determinant of the 10 percent mandated CLIA review, the risk of missing what have been termed "litigation cells" should be greatly reduced. "Litigation cells" are abnormal cells found to be on the Pap in plaintiff's expert review, otherwise called false negative Paps. Saying that, however, we must keep in mind that no test or combination of tests is likely to ever be 100 percent protective, and some cervical cancers are bound to occur irrespective of the screening tests used.

[Dr. Saraiya] Some of the guidelines say that even if a woman has a new sexual partner, she can wait three years before her next Pap and HPV DNA test. Is this true?

[Dr. Cox] Absolutely. I am not sure that any woman has ever been documented to get cervical cancer from new HPV infection within three years of exposure. Recent data from Europe indicates safety for at least six years for women negative on both a Pap and an HPV test.

[Dr. Saraiya] If a woman has had a history of an abnormal Pap or abnormal histology with appropriate follow-up and is back on a regular screening schedule, the guidelines are not clear about whether it's appropriate to wait three years if her HPV and Pap test are negative. Can you comment on that?

[Dr. Cox] Yes, the guidelines are not clear on that, but the sensitivity of the combined test does not change in these circumstances and should be just as reassuring. The intent of the guidelines was to not put qualifiers on the three-year extension. In fact, we often do not know for sure the previous Pap results if patients change from practice to practice. Hence, a major advantage of the cotest over screening with the Pap alone is being able to extend the screening interval for nearly all women who have a negative Pap and HPV test, despite not having a full Pap history at hand.

[Dr. Saraiya] Dr. Cox, as a gynecologist, when you tell a woman to come back in three years for her next Pap test, does this mean that she should not come back at all for three years?

[Dr. Cox] No not at all. Women should continue to have routine preventative health care.

It is important to educate the U.S. public that the "Pap" is not equivalent to the "annual exam." Instead, the Pap test is just one test done at intervals now more tailored to the individual's needs. Women still need annual preventative health care, including contraceptive services, breast and pelvic exam, screening for STDs as needed, cardiovascular, diabetes and other risk assessment, screening for depression, bone density and other peri- and post-menopausal concerns, and other age-specific preventative health care.

[Dr. Saraiya] Dr. Cox, thank you so much for sharing this information with us today. If you would like more information on what Dr. Cox has shared, please go to asccp.org.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.