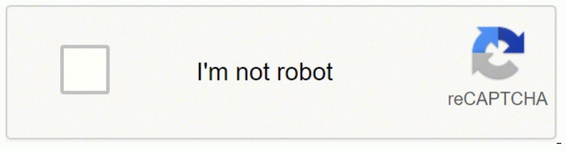

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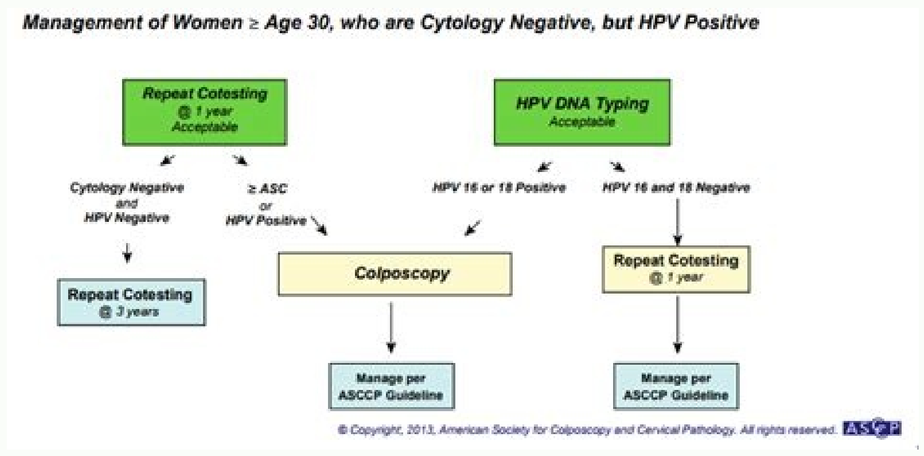
Uspstf cervical cancer screening guidelines 2003



	Breast cancer screening	Cervical cancer screening
	Odds ratio (95 % confidence interval)	
Provider characteristics		
Age:		
<40 years	1.74 (0.75–4.02)	0.44 (0.22–0.89)
40–49 years	1.51 (0.70–3.26)	0.82 (0.53–1.73)
50–59 years	Reference	Reference
60+years	1.52 (0.61–3.79)	0.77 (0.37–1.60)
Sex:		
Female	Reference	Reference
Male	1.75 (0.90–3.39)	1.74 (1.09–3.03)
Provider specialty:		
Family medicine (MD/ DO)	0.96 (0.46–2.0)	0.53 (0.28–1.03)
General internal medicine (MD/ DO)	Reference	Reference
Gynecology (MD/ DO)	6.43 (1.89–21.31)	0.29 (0.13–0.65)
Physician assistant, nurse practitioner, certified nurse midwife	4.83 (1.50–15.55)	0.79 (0.34–1.81)
Typical week, no. of office visits		
1–25	0.55 (0.22–1.34)	1.04 (0.49–2.17)
26–50	0.64 (0.31–1.31)	0.64 (0.35–1.17)
51–75	Reference	Reference
76+	1.74 (0.68–4.45)	1.17 (0.66–2.31)
Main practice characteristics		
National Committee for Quality Assurance (NCQA)-recognized medical home		
No	1.99 (0.78–5.09)	0.60 (0.29–1.27)
Yes	Reference	Reference
Practice type:		
Non–hospital-based office	Reference	Reference
Hospital-based office	0.36 (0.18–0.74)	0.52 (0.29–0.94)
Community health center	0.29 (0.09–0.92)	0.71 (0.26–1.94)
Number of full- or part-time physicians in practice		
1–4	0.83 (0.36–1.91)	0.51 (0.26–0.99)
5–10	Reference	Reference
11–20	0.64 (0.28–1.69)	0.81 (0.39–1.68)
21–50	0.84 (0.26–2.73)	0.61 (0.22–1.65)
50+	0.78 (0.18–3.46)	0.42 (0.12–1.39)

Models adjusted for provider age, sex, specialty, number of office visits per week, and practice characteristics including NCQA recognition as a medical home, practice type and size, and clinical network

TABLE 1

Screening for Cervical Cancer: Clinical Summary of the USPSTF Recommendations

Population	Women aged 21 to 29 years	Women aged 30 to 65 years	Women younger than 21 years, women older than 65 years with adequate prior screening, and women who have had a hysterectomy
Recommendations	Screen for cervical cancer every 3 years with cytology alone. Grade: A	Screen for cervical cancer every 3 years with cytology alone, every 5 years with hrHPV testing alone, or every 5 years with cotesting. Grade: A	Do not screen for cervical cancer. Grade: D
Risk assessment	All women aged 21 to 65 years are at risk for cervical cancer because of potential exposure to hrHPV types through sexual intercourse and should be screened. Certain risk factors further increase risk for cervical cancer, including HIV infection, a compromised immune system, in utero exposure to diethylstilbestrol, and previous treatment of a high-grade precancerous lesion or cervical cancer. Women with these risk factors should receive individualized follow-up.		
Screening tests	Screening with cervical cytology alone, primary testing for hrHPV alone, or both at the same time (cotesting) can detect high-grade precancerous cervical lesions and cervical cancer. Clinicians should focus on ensuring that women receive adequate screening, appropriate evaluation of abnormal results, and indicated treatment, regardless of which screening strategy is used.		
Treatment and interventions	High-grade cervical lesions may be treated with excisional and ablative therapies. Early-stage cervical cancer may be treated with surgery (hysterectomy) or chemotherapy.		

Note: These recommendations apply to individuals who have a cervix, regardless of their sexual history or HPV vaccination status. These recommendations do not apply to individuals who have been diagnosed with a high-grade precancerous cervical lesion or cervical cancer, those with in utero exposure to diethylstilbestrol, or those who have a compromised immune system (e.g., individuals living with HIV).

Note: For a summary of the evidence systematically reviewed in making this recommendation, the full recommendation statement, and supporting documents, go to https://www.uspreventiveservicestaskforce.org/.

HIV = human immunodeficiency virus; hrHPV = high-risk HPV; USPSTF = U.S. Preventive Services Task Force.

Evaluation of human papillomavirus testing in primary screening for cervical abnormalities: comparison of sensitivity, specificity, and frequency of referral. de Vet HC, Sturmans F, Knipschild PG. Epidemiology, 1994;5(6):631-633. Efficacy of cervical-smear collection devices: a systematic review and meta-analysis [published erratum appears in Lancet, 2000 Jan 29;355(9201):414]. Lyons: IARC; 1995;64. HPV testing in primary screening of older women. Washington, DC: ACOG;2002: 121-134, 140-141. Return to Table of Contents Members of the U.S. Preventive Services Task Force are Alfred O. Woolf, M.D., M.P.H. (Professor, Department of Family Practice and Department of Preventive and Community Medicine, Virginia Commonwealth University, Fairfax, VA). The positive predictive value of cervical smears in previously screened postmenopausal women: the Heart and Estrogen/progestin Replacement Study (HERS). In 1 study of more than 2,561 postmenopausal women (average age 67 years) who had normal baseline smears and were generally at low risk for cervical cancer, annual screening done over 4 years produced 110 abnormal results requiring diagnostic evaluations, which generated 231 additional interventions (ranging from repeat Pap smears to colposcopy and biopsies); one case of "mild to moderate dysplasia" was diagnosed.21 The difficult trade-off between over-screening and missing rare but potentially preventable cases of cervical cancer is a challenge for policy. American Cancer Society. Berg, M.D., M.P.H., Chair, USPSTF (Professor and Chair, Department of Family Medicine, University of Washington, Seattle, WA); Janet D. Canadian Guide to Clinical Preventive Health Care. It has been replaced by the following: Cervical Cancer: Screening (2018) This topic is being updated. Available at www.ama-assn.org. Only 1 study of 2,988 women having routine cervical cancer screening at 40 general practitioner practices in the U.K. approximates screening use in routine primary care practice in the United States.19 In conditions of low prevalence of high-grade squamous intraepithelial lesions (HSIL) typical of primary care practice, the USPSTF estimated sensitivity of testing for HPV using Hybrid Capture II for HSIL at 82 percent; specificity, 78 percent; positive predictive value, 18 percent; and negative predictive value, 99 percent. Guide to Clinical Preventive Services, 2nd ed. American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health. Although the prevalence of HPV infection is higher among immunocompromised hosts such as HIV-infected women, the speed of progression to cervical cancer is not increased. Pender, Ph.D., R.N. (Professor Emeritus, University of Michigan, Ann Arbor, MI)*; Albert L. Bethesda, Md: National Cancer Institute, 1998. Sasieni PD, Cuzick J, Lynch-Farmery E. Host factors such as age, nutritional status, immune function, smoking, and possibly silent genetic polymorphisms modulate incorporation of viral DNA into host cervical cells. The role of cigarette smoking in the etiology of cervical dysplasia. Peipert, M.D., M.P.H. (Director of Research, Women and Infants' Hospital, Providence, RI)*; Nola J. American Cancer Society Guideline for the Early Detection of Cervical Neoplasia and Cancer. The USPSTF concludes that the benefits of screening substantially outweigh potential harms. Data from a large screening program in the United States indicate that a longer interval (3 years vs 1 or 2 years) between Pap tests is not associated with a higher risk for developing high-grade lesions.27 Potential Harms of Screening and Treatment The USPSTF did not identify studies that specifically addressed harms of new technologies for cervical cancer screening. Rates in the United States have decreased from 14.2 new cases per 100,000 women in 1973 to 7.8 cases per 100,000 women in 1994. Practice Policy Statement: Cervical Cancer Screening. The USPSTF found fair evidence that the yield of cytologic screening is very low in women after hysterectomy and poor evidence that screening to detect vaginal cancer improves health outcomes. Return to Table of Contents The USPSTF concludes that potential harms of continued screening after hysterectomy are likely to exceed benefits. These organizations recommend that initial screening be conducted annually, but most recommendations permit Pap testing less frequently after three or more normal annual smears, based on patient risk factors and the discretion of the patient and physician. American Academy of Family Physicians. International Agency for Research on Cancer (IARC) Working Group on the Evaluation of Cervical Cancer Screening Programmes. Bosch FX, Manos MM, Munoz N, et al. Smith RA, Cokkinides V, von Eschenbach AC, et al. A general primer GP5+/GP6(+)-mediated PCR-enzyme immunoassay method for rapid detection of 14 high-risk and 6 low-risk human papillomavirus genotypes in cervical scrapings. Similar results were reported in a recent study in Planned Parenthood clinics: both Hybrid Capture II and PCR testing were more sensitive than liquid-based cytology (88-91 percent vs 61 percent) but were less specific (73-79 percent vs 82 percent).20 The benefits of HPV testing as an alternative or adjunct to primary Pap screening have not yet been tested in prospective studies. Available at: . Trends in cervical intra-epithelial neoplasia in Iceland through 1995: evaluation of targeted age groups and screening intervals. Trials are underway that should soon clarify the role of HPV testing in cervical cancer screening. Data from 8 cervical cancer screening programs involving 1.8 million women compared the effects of different intervals among the programs: screening at intervals of 5, 3, 2 years or 1 year was estimated to reduce incidence of invasive disease by 84 percent, 91 percent, 93 percent, and 94 percent, respectively, among women aged 35-64, assuming perfect compliance. With regard to HPV testing, the USPSTF did not identify any studies that quantified harms. CA Cancer J Clin, 2002;52(1):8-22. The only model identified finds that new technologies are more costly than conventional cytology and that new technologies will fall within the traditional range considered to be cost-effective ($50,000 per life-year) only if used in screening intervals of 3 years or longer.18 In the absence of studies with cervical cancer outcomes, the USPSTF concluded that the available data on the accuracy of new technologies were insufficient to determine whether they are more effective than conventional cervical cytology for preventing invasive cervical cancer. Smoking and carcinoma in situ of the uterine cervix. The effect of hysterectomy on the risk of an abnormal screening Papanicolaou test result. Although no prospective trial of Pap screening has ever been conducted, correlational studies of cervical cancer trends in countries in North America and Europe demonstrate dramatic reductions in incidence of invasive cervical cancer and a 20-60 percent reduction in cervical cancer mortality. In the United States, peak incidence and prevalence of HPV infection occur among women younger than 25 but most infections in younger women are transient. At the same time, there are few data on the potential harms of HPV testing, which may include anxiety or stigmatization among infected women and affects on relationships with sexual partners. Summary of Policy Recommendations for Periodic Health Examinations, December, 2001. Although 92 percent of women will survive 5 years when the cancer is localized, only 13 percent will survive distant disease.24 Introduction of screening programs to populations naïve to screening reduces cervical cancer rates by 60-90 percent within 3 years of implementation.25,26 This reduction of mortality and morbidity with introduction of the Pap test is consistent and dramatic across populations. Lancet 1999;354(9192):1763-1770. Potential harms commented on in the literature include stigma, partner discord, adverse effects of labeling some women as being at high risk for cervical cancer, and the potential undermining of routine cytologic screening known to be effective. Ann Intern Med, 2000;133(12):942-50. International Agency for Research on Cancer (IARC). There is fair evidence that screening women older than 65 is associated with an increased risk for potential harms, including false-positive results and invasive procedures. Sigurdsson K. Washington, DC: Office of Disease Prevention and Health Promotion; 1996. Br Med J, 1986;293(6548):659-664. N Engl J Med, 1996(21);335:1559-1562. The National Co-ordinating Network for Cervical Screening Working Group. Smoking and cervical cancer — current status: a review. Indirect evidence suggests most of the benefit can be obtained by beginning screening within 3 years of onset of sexual activity or age 21 (whichever comes first) and screening at least every 3 years (refer to Clinical Considerations). A previous review estimated that the sensitivity of a single Pap test was 60-80 percent for high-grade lesions, and even lower for low-grade lesions.18] The USPSTF review focused on new evidence about thin layer cytology (ThinPrep®, AutoCyte PREP®), computerized rescreening (PapNet®), and algorithm-based screening (AutoPap®), all recent technical extensions of conventional cytology methods. These harms are poorly documented for conventional Pap testing and have not yet been assessed for new technologies. The literature provides fairly reliable estimates of the number of women who need to be screened to detect serious lesions. As a result, the USPSTF concludes that it cannot determine whether the potential benefits of new screening devices relative to conventional Pap tests are sufficient to justify a possible increase in potential harms or costs. Effectiveness of Early Detection Detection of cervical cancer in its earliest stages is lifesaving, as survival of cancer of the cervix uteri depends heavily on stage at diagnosis. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited. Risk factors relating to sexual behavior associated with an increased risk of cervical cancer include early onset of intercourse and a greater number of lifetime sexual partners. Cancer facts and figures, 2002. Cancer screening guidelines. The USPSTF found limited evidence to determine the benefits of continued screening in women older than 65. Am J Public Health, 1995;85(6):791-794. Sawaya GF, Grady D, Kerlikowske K et al. Cervical cancer in older women is not more aggressive or rapidly progressive than in younger women. Accessed at on November 12, 2002. Return to Table of Contents The new guidelines of the American Cancer Society (ACS) recommend initiating screening 3 years after onset of sexual activity but no later than age 21.4 ACS recommends annual screening with conventional Pap tests, or screening every 2 years if liquid-based cytology is used, until age 30; thereafter, the screening interval can be extended to 2-3 years based on past screening results and risk factors. Elk Grove Village, IL: American Academy of Pediatrics; 1997. Despite falling incidence, cervical cancer remains the tenth leading cause of cancer death.10 The Healthy People 2010 target for cervical cancer is a reduction in mortality to 2.0 deaths per 100,000 women. Rockville, MD: Agency for Health Care Policy and Research. Recommendations made by the USPSTF are independent of the U.S. government. The estimated sensitivity of testing for HPV using Hybrid Capture II for LSIL was 66 percent; specificity, 91 percent; positive predictive value, 26 percent; and negative predictive value, 98 percent. Since 1998, the rate remains near 3.0 deaths per 100,000 women.11 Squamous cell carcinoma of the cervix and its cytologic precursors occur among women who are sexually active. Infections with HPV in older women are much less prevalent but carry a higher risk of progressing to cervical neoplasia. Am J Epidemiol, 1990;131(6):945-957. Am J Public Health, 1983;73(5):558-562. Am J Prev Med, 1996;12(5):342-4. As an example, if the sensitivity of cytology is 60 percent and the specificity is 98 percent for detection of high-grade abnormalities, then 34 women will be evaluated for high-grade squamous intraepithelial lesions for each true high-grade cervical lesion identified; moreover, 2 high-grade lesions will have been missed by cytology for every 3 cases identified. February 1999. Accuracy and Reliability of Screening Tests Cervical cancer screening tests potentially appropriate for primary care settings include cervical cytology, conventional and new technologies, and tests for HPV infection. Evidence to determine both sensitivity and specificity of new screening technologies is limited. Br J Cancer, 1999;81(3):554-558. Pearce K, Haefner H, Sarwar S, Nolan T. Cuzick J, Beverley E, Ho L, et al. Screening for Cervical Cancer. (Prepared by Duke University under Contract No. 290-97-0014.) AHCPR Publication No. 99-E010. In a second study of nearly 10,000 Pap tests performed over 2 years in 6,265 women who had hysterectomies for benign disease, screening yielded 104 abnormal Pap tests but only 4 high-grade lesions: 3 cases of vaginal intraepithelial neoplasia and 1 case of squamous cell carcinoma of the vagina (rate of 0.42 high-grade lesions per 1,000 Pap tests).23 Whether detection of these vaginal lesions improved clinical outcomes is unknown. No current screening guidelines specifically recommend using HPV testing for screening, or recommend newer Pap test technologies in favor of conventional Pap tests. Expand All The USPSTF found good evidence from multiple observational studies that screening with cervical cytology (Pap smears) reduces incidence of and mortality from cervical cancer. Finally, the rates of high-grade squamous intraepithelial lesions diagnosed by cytology are low among older women who have been screened. Lieu, M.D., M.P.H. (Associate Professor, Department of Ambulatory Care and Prevention, Harvard Pilgrim Health Care and Harvard Medical School, Boston, MA)*; C. McCrory DC, Mather DB, Bastian L. There are at least eight studies evaluating HPV testing in large populations underway or recently completed but not yet in the published literature. U.S. Preventive Services Task Force. Fox J, Remington P, Layde P, Klein G. Sawaya GF, Kerlikowske K, Lee NC, Gildengorin G, Washington AE. J Natl Cancer Inst, 1995;87(11):796-802. Screening Using Cytologic Methods The USPSTF did not re-examine test characteristics of conventional cervical cytology smears. Obstet Gynecol, 2000;96(2):219-23. Cytopathological findings on vaginal Papanicolaou smears after hysterectomy for benign gynecological disease. Guidelines for Health Supervision III. Better data on the performance characteristics (sensitivity, specificity, and predictive values) of the new screening technologies are needed to determine the risk for harm to an individual patient. Janerich DT, Hadjimichael O, Schwartz PE, et al. The ratio of true positives to false positives is much higher if low-grade cytologic changes are considered, but many of these will regress without treatment.18 Screening Using Tests for HPV Six studies prior to 2002 examined the role of HPV as a primary screening test, five of which used a study population at high risk for cervical dysplasia. The screening histories of women with invasive cervical cancer, Connecticut. American Medical Association. Teutsch, M.D., M.P.H. (Senior Director, Outcomes Research and Management, Merck & Company, Inc., West Point, PA); Carolyn Westhoff, M.D., M.Sc. (Professor of Obstetrics and Gynecology and Professor of Public Health, Columbia University, New York, NY); and Steven H. Special Considerations in Older Women and in Women Who Have Had a Hysterectomy Multiple studies published since 1995 provide sufficiently detailed information about results of screening by age to examine the evidence about screening among older women.2 The incidence and prevalence of cervical intraepithelial neoplasia peak in the mid-reproductive years and begin to decline in approximately the fourth decade of life, a general pattern also apparent among previously unscreened women. Prevalence of human papillomavirus in cervical cancer: a worldwide perspective. Jacobs MV, Snijders PJ, van den Brule AJ, Helmerhorst TJ, Meijer CJ, Walboomers JM. This finding suggests that increased detection of low-grade lesions and false positives are the primary potential sources of harm; that is, harm may take the form of increased evaluations, including repeated Pap tests and biopsies; possible unnecessary treatment for low-grade lesions; and psychological distress for the women diagnosed with low grade lesions that may not have been clinically important. Hawkes AP, Kronenberger CB, MacKenzie TD et al. Johnson, M.D., M.P.H. (Professor of Family Medicine, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Newark, NJ); Jonathan D. Hartman KE, Hall SA, Nanda K, Boggess JF, Zolnoun D. Mitchell HS, Giles GG. Accessed November 13, 2002. Most other North American organizations have previously recommended beginning screening at onset of sexual activity or at age 18; these include the American Academy of Family Physicians (AAFP),28 American College of Obstetricians and Gynecologists (ACOG),7 American College of Preventive Medicine (ACPM),29 American Medical Association (AMA),30 the Canadian Task Force on Preventive Health Care (CTFPHC),31 and the American Academy of Pediatrics (AAP).32 Some of them may update their guidelines in light of the new recommendations on starting age. * Member of the USPSTF at the time this recommendation was finalized. Ries LA, Kosary CL, Hankey BF, et al., eds.: SEER Cancer Statistics Review 1973-1995. JAMA, 2002;288(14):1749-57. Available at . Two large series documenting the low risk of cytologic abnormality after hysterectomy have been published since the last USPSTF made its recommendations. U.S. Department of Health and Human Services. Available at . Atlanta: American Cancer Society, 2002. Evaluation of Cervical Cytology: Evidence Report/Technology Assessment No. 5. The USPSTF found poor evidence to determine the benefits and potential harms of HPV screening as an adjunct or alternative to regular Pap smear screening. Klein, M.D., M.P.H. (Associate Professor, Department of Pediatrics, University of Rochester School of Medicine, Rochester, NY); Tracy A. American College of Obstetricians and Gynecologists. (Reviewed in 1999). Estimating the efficacy of screening by

auditing smear histories of women with and without cervical cancer. Available at Accessed January 23, 2002. Summaries and Evaluations: Human Papillomaviruses. Healthy People 2010: Understanding and Improving Health. January 2002. 2nd ed. Furthermore, no prospective studies have compared the new technologies to conventional Pap screening using the most important health outcomes (e.g., invasive cervical cancer) or costs and cost-effectiveness. Recommendations made by the USPSTF are independent of the U.S. government. Am J Obstet Gynecol, 1999;180(3 Pt 1):571-577. In: Canadian Task Force on the Periodic Health Examination. Return to Table of Contents Return to Table of Contents Approximately 13,000 new cases of cervical cancer and 4,100 cervical cancer-related deaths were projected to occur in 2002 in the United States. Systematic Evidence Review. Siu, M.D., M.S.P.H. (Professor of Medicine, Chief of Division of General Internal Medicine, Mount Sinai School of Medicine, New York, NY); Steven M. Adding HPV testing to conventional screening is unlikely to be worthwhile, but HPV testing may have a role in primary screening if it can reliably distinguish between women who would benefit from more intensive Pap testing (more frequent, different technologies, or extended over longer periods) and women for whom screening can be less intensive or even discontinued. Accessed September 6, 2001. Available at www.ctfphc.org/Full_Text_printable/Ch73full.htm. Cigarette smoking is the only nonsexual behavior consistently and strongly correlated with cervical dysplasia and cancer, independently increasing risk two- to four-fold.12-14 Infection with high-risk strains of human papilloma virus (HPV), generally acquired sexually, is the most important risk factor for cervical cancer. Hildesheim A, Hadjimichael O, Schwartz PE, et al. Ottawa: Health Canada, 1994; 870-881. These and other data suggest that the risks of high-grade cervical lesions and cancer fall with age; that a history of prior normal Pap tests further reduces risk; and that if screening recommendations are not modified with age, older women are disproportionately likely to be evaluated for false-positive findings. Natural history studies confirm that, in the vast majority of cases, the course of infection and cervical abnormalities that progress do so in an orderly fashion from less severe to more severe lesions. Accessed January 23, 2002. The yield of screening is low in previously screened women older than 65 due to the declining incidence of high-grade cervical lesions after middle age. Washington, DC: U.S. Government Printing Office, November 2000. No prospective studies have directly compared the outcomes of screening at different intervals in a given population. American College of Preventive Medicine. Allan, Ph.D., R.N., Vice-chair, USPSTF (Dean, School of Nursing, University of Maryland Baltimore, Baltimore, MD); Paul Frame, M.D. (Tri-County Family Medicine, Cohocton, NY, and Clinical Professor of Family Medicine, University of Rochester, Rochester, NY); Charles J. Winkelstein W. The USPSTF concludes that the potential harms of screening are likely to exceed benefits among older women who have had normal results previously and who are not otherwise at high risk for cervical cancer. Using modern HPV detection methods, 95-100 percent of squamous cell cervical cancer and 75-95 percent of high-grade CIN lesions have detectable HPV DNA.15-17 HPV is a necessary but insufficient precursor of squamous cell carcinoma of the cervix. Cancer diagnosis after a report of negative cervical cytology. International biological study on cervical cancer (IBSCC) Study Group. Br J Cancer, 1996;73(8):1001-1005. The USPSTF found few studies testing the new technologies against an adequate reference standard (colposcopy or histology) and few that included validation of normal screening test results.2,18 As a result, sensitivity, specificity, and predictive values of the new technologies cannot be directly assessed or compared with the test characteristics of conventional cytology in the same population. Screening for squamous cervical cancer: duration of low risk after negative results of cervical cytology and its implication for screening policies. A cross-sectional study of more than 5,000 Pap tests among women older than age 50 documented that identification of dysplasia and cancer was rare in this age group after hysterectomy (0.18/1,000 women screened).22 Women after hysterectomy were one tenth as likely as those with a cervix to have any Pap test diagnosis of abnormality. Please use the link(s) below to see the latest documents available. Frequency of cervical smear abnormalities within 3 years of normal cytology. J Clin Microbiol, 1997;35(3):791-795. The USPSTF found poor evidence to determine whether new technologies, such as liquid-based cytology, computerized rescreening, and algorithm based screening, are more effective than conventional Pap smear screening in reducing incidence of or mortality from invasive cervical cancer. Am J Obstet Gynecol, 1999;180(5):1104-1109. Rockville, MD: Agency for Healthcare Research and Quality. Although the data are limited, on average these tools improve sensitivity and reduce specificity. (Prepared by the Research Triangle Institute-University of North Carolina Evidence-based Practice Center under contract No. 290-97-0011). Homer, M.D., M.P.H. (Executive Director, National Initiative for Children's Healthcare Quality, Boston, MA)*; Mark S. Morrison BJ. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services. No. 25. Risk factors for rapid-onset cervical cancer. Guidelines for Women's Health Care. Acta Obstet Gynecol Scand, 1999;78(6):486-492. Among previously screened women with a history of normal Pap tests, fewer than 1 woman in 1,000 screened (in some scenarios as few as 1 woman in 10,000) will have a high-grade cytologic abnormality. Lyon JL, Gardner JW, West DW, Stanish WM, Hebertson RM. Guidelines of the ACS,4 AAFP,28 ACPM,29 and the CTFPHC31 recommend discontinuing screening, or offering the option for patients to discontinue screening, after age 65 or 70 provided there is documented evidence of adequate past screening; details of what constitutes "adequate" past screening vary. Martin-Hirsch P, Lilford R, Jarvis G, Kitchener HC. Tracy Orleans, Ph.D. (Senior Scientist and Senior Program Officer, The Robert Wood Johnson Foundation, Princeton, NJ); Jeffrey F. Med J Aust, 1996;164(5):270-273. Return to Table of Contents Kulasingam SL, Hughes JP, Kiviat NB et al.

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