



Cervical Cancer Screening

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Objectives

- ▶ Understand proper specimen collection
- ▶ List the organizations that agree on the 2012 screening guidelines
- ▶ List the 3 at-risk populations for whom these guidelines don't apply
- ▶ Describe when to start & stop screening and the evidence why
- ▶ Describe the recommended screening for women ages 21-29, that for women ages 30-65, and the evidence why
- ▶ Describe the algorithms for normal cytology with positive HPV

Benefits of Screening

- ▶ Cervical cancer has decreased by more than 50% in the past 30 years
- ▶ Approximately 12,000 new cases annually and 4,000 deaths
- ▶ 60% of cervical cancer diagnoses were among inadequately screened women
- ▶ We will have to wait 20 years after widespread HPV vaccination before we see a significant reduction in cervical cancer, so screening is still the best approach.

Possible Harms of Screening

- ▶ Anxiety over positive results
- ▶ Stigma of STI
- ▶ Pain/bleeding from procedures
- ▶ Treatment-related complications during pregnancy

Pap Specimen Collection

- ▶ Avoid collection within 48 hours after intercourse, use of personal lubricants, vaginal medications, or during menses
- ▶ Limit use of lubricant on the speculum
- ▶ Spatula & brush or broom

http://www.thinprep.com/hcp/specimen_collection/view_video.html



Consensus Conference, March 2012

- ▶ Sponsored by ASCCP (American Society of Colposcopy and Cervical Pathology), ACS (American Cancer Society), and ASCP (American Society of Clinical Pathology)
- ▶ Simultaneous recommendations by USPSTF
- ▶ Updated Practice Bulletin by ACOG in November 2012

* Does not apply to women with a h/o cervical cancer, are immunocompromised, or were exposed in utero to DES

When to start... when to stop...

- ▶ Initiate screening at age 21 regardless of age at coitarche
- ▶ Stop at 65 if:
 - ▶ No history of CIN2+ within the past 20 years AND
 - ▶ 3 consecutive normal Paps (or 2 consecutive normal Paps and negative HPV results) within the last 10 years, most recent of which was within the last 5 years
- ▶ Stop after total hysterectomy for benign indication

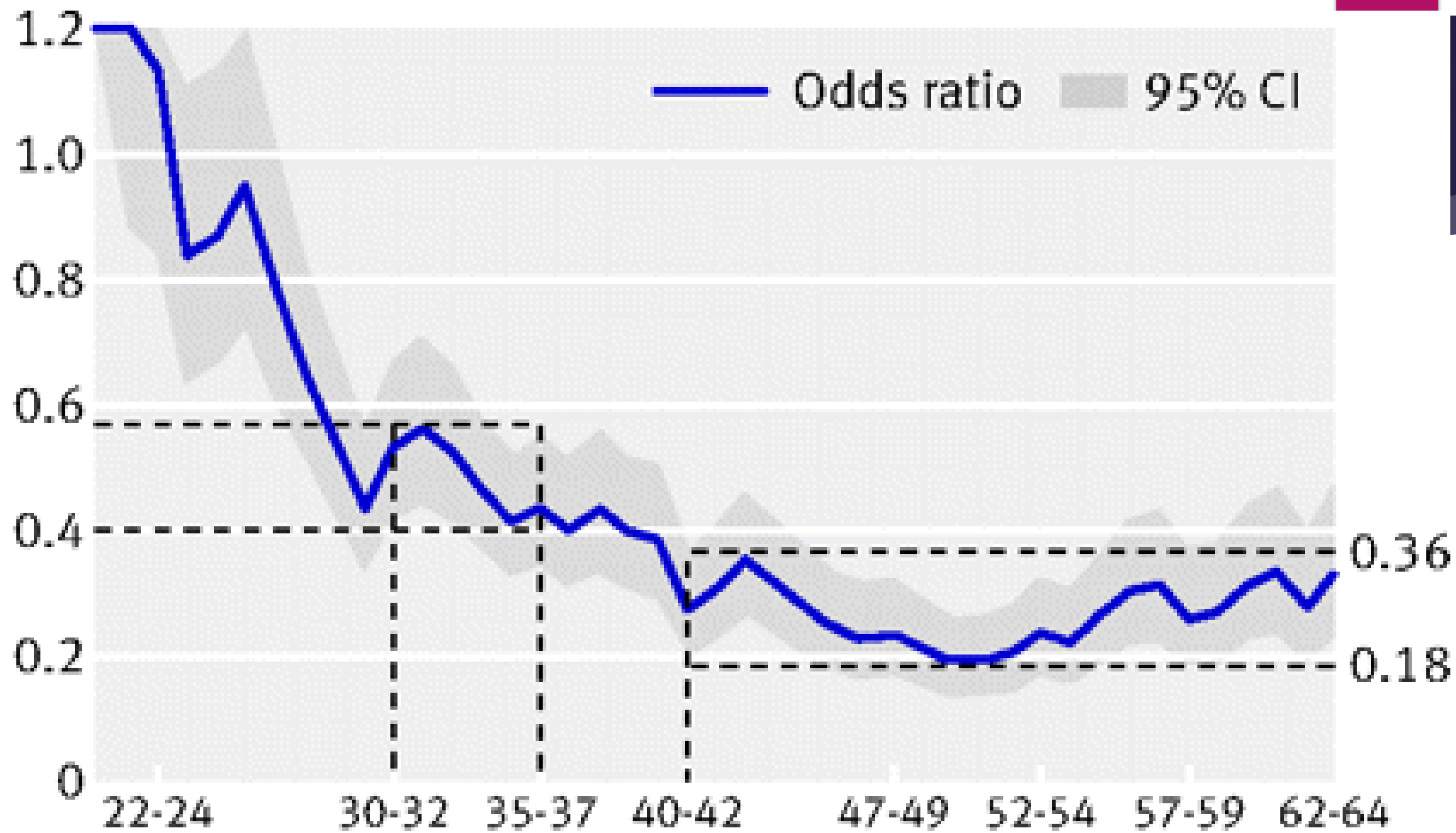
Don't start before age 21

- ▶ Cervical cancer is rare
- ▶ Screening doesn't decrease rates of invasive cancer
- ▶ Most cases of HPV and low-grade dysplasia will regress spontaneously
- ▶ Increased risk for preterm delivery and low birth weight infants

Cervical Cancer Incidence by Age

AGE	RATE PER 100,000
0-19	0.1
20-29	4.5
30-39	13.9
40-49	16.5
50-64	15.4
65+	14.6

Odds ratio



Screening age (years)

Adolescents

- ▶ 90% of HPV, LSIL, and CIN1 regress within 3 years
 - ▶ But 50% will have HPV reinfection within 3 years after clearance of initial infection.
- ▶ 60% of CIN2 regress within 3 years

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Don't continue after age 65

- ▶ Risk of cancer and cancer death is low
 - ▶ Only prevents 1.6 cancer cases and 0.5 cancer deaths per 1000 women
- ▶ New HPV infection after 65 rarely progresses to cancer
 - ▶ Average time for HPV to progress to cancer is 20-25 years
- ▶ Exams are more uncomfortable and more likely to yield unsatisfactory or inaccurate results

* Exception: symptomatic women (i.e. PMB)

What to ask for?

- ▶ Ages 21-29: Cytology with reflex HPV if ASCUS
- ▶ Ages 30-65: Cytology AND HPV

Screening Interval

- ▶ Ages 21-29: Every 3 years if last Pap was negative
- ▶ Ages 30-65:
 - ▶ Every 5 years if last Pap and HPV were negative
 - ▶ Every 3 years if last Pap (without HPV) was negative

Every 3 years if 21-29

- ▶ Compared to 2-year intervals:
 - ▶ No increased lifetime risk of cervical cancer
 - ▶ No increased lifetime risk of death from cervical cancer
 - ▶ But 40% more colposcopies

Cotesting Every 5 Years if 30-65

- ▶ 6-year risk of CIN3+ among almost 25,000 women
 - ▶ 0.27% following a negative HPV test
 - ▶ 0.97% following a negative cytology result
- ▶ Cotesting at 5-year intervals had decreased risk of CIN3 compared to cytology alone at 3-year intervals
- ▶ Fewer colposcopies with similar or lower cancer risk

* Potential for primary HPV testing

Summary of Recommendations

- ▶ <21: DON'T TEST
- ▶ Women Ages 21-29
 - ▶ Pap with reflex HPV if ASCUS every 3 years
- ▶ Women Ages 30-65
 - ▶ Pap with HPV every 5 years
- ▶ >65: DON'T TEST

Results: Unsatisfactory Cytology

- ▶ Repeat Pap in 2-4 months
- ▶ Option of colpo immediately if over 30 and HPV+

Results: Transformation Zone Absent

- ▶ Routine screening if ages 21-29 or if 30+ and HPV negative
- ▶ Cotesting in 12 months if 30+ and HPV positive

ASCUS, HPV Negative

- ▶ Ages 21-29: continue routine screening
- ▶ Ages 30-65: cotesting in 3 years

Negative Cytology, HPV Positive (30+)

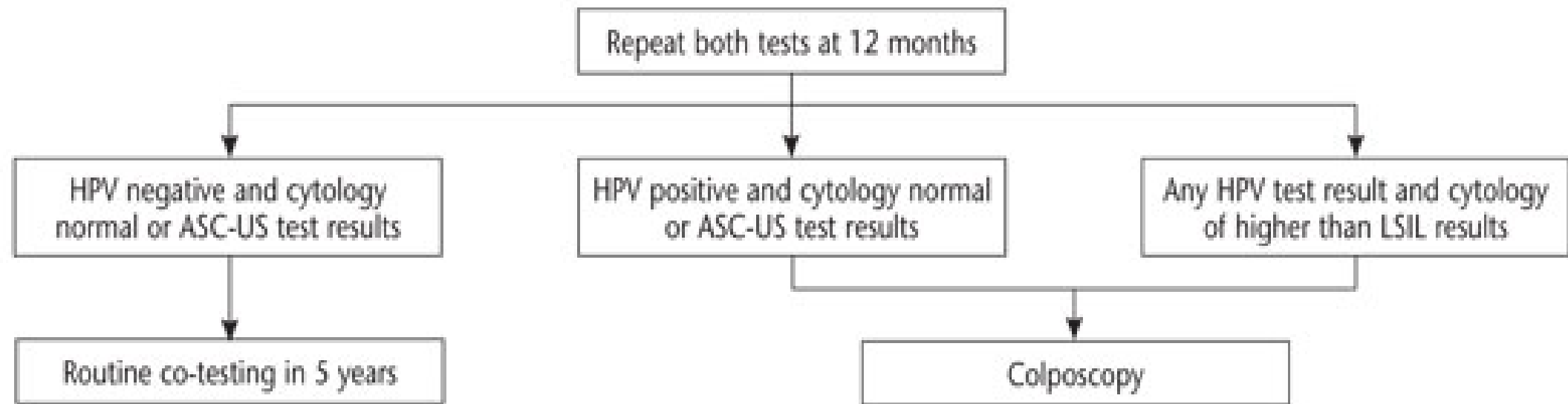


Fig. 1. Management of cytology negative and human papillomavirus positive co-testing results—option 1. (Saslow D, Solomon D, Lawson HW, Killackey M, Kulasingam SL, Cain J, et al. American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology screening guidelines for the prevention and early detection of cervical cancer. *CA Cancer J Clin* 2012;62:147–72.)

Abbreviations: ASC-US indicates atypical squamous cells of undetermined significance; HPV, human papillomavirus; LSIL, low-grade squamous intraepithelial lesion.

Negative Cytology, HPV Positive (30+)

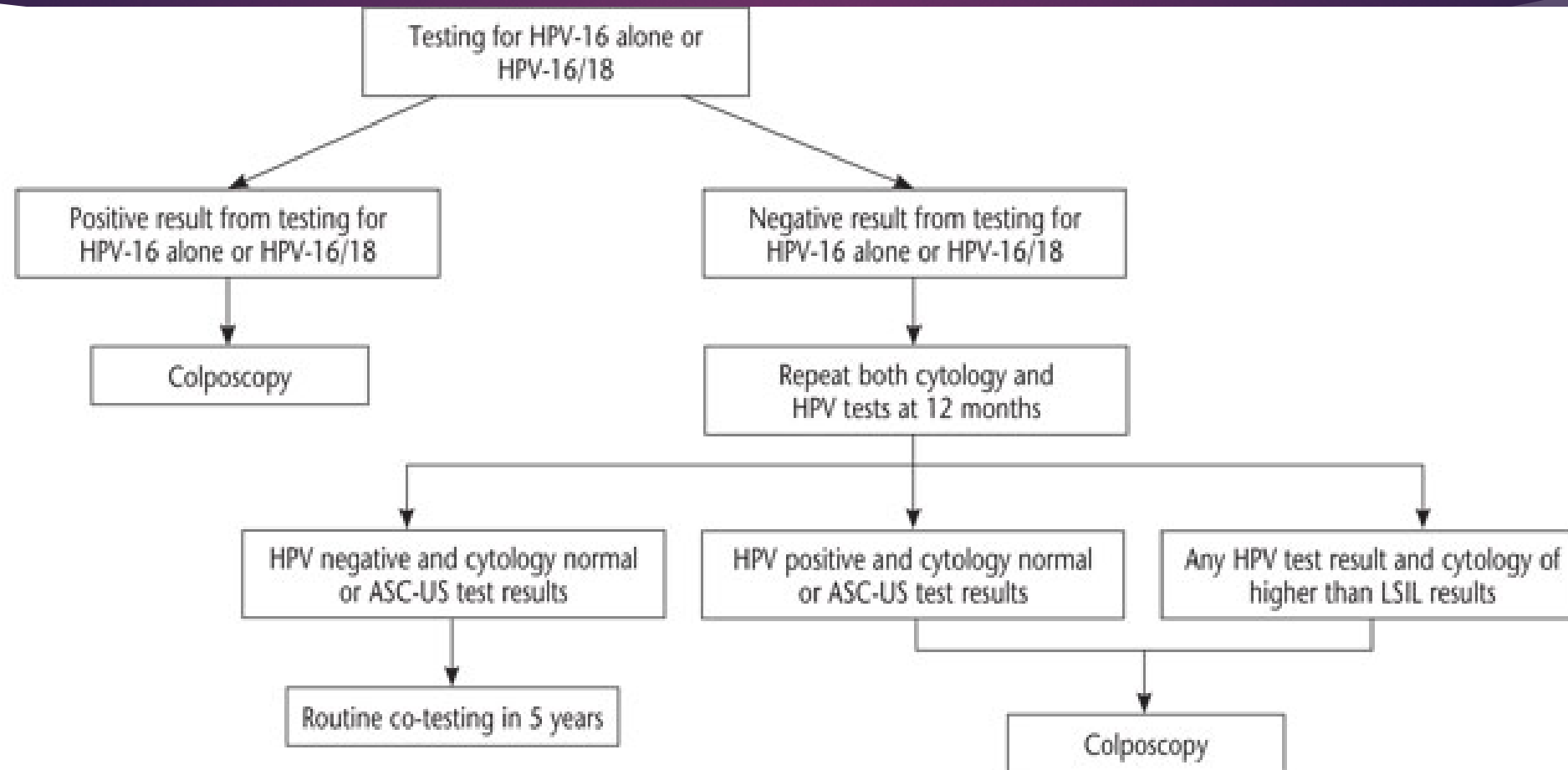


Fig. 2. Management of cytology negative and human papillomavirus positive testing results—option 2. (Saslow D, Solomon D, Lawson HW, Killackey M, Kulasingam SL, Cain L, et al. American Cancer Society, American Society for Colposcopy and Cervical Pathology, and

When to Refer

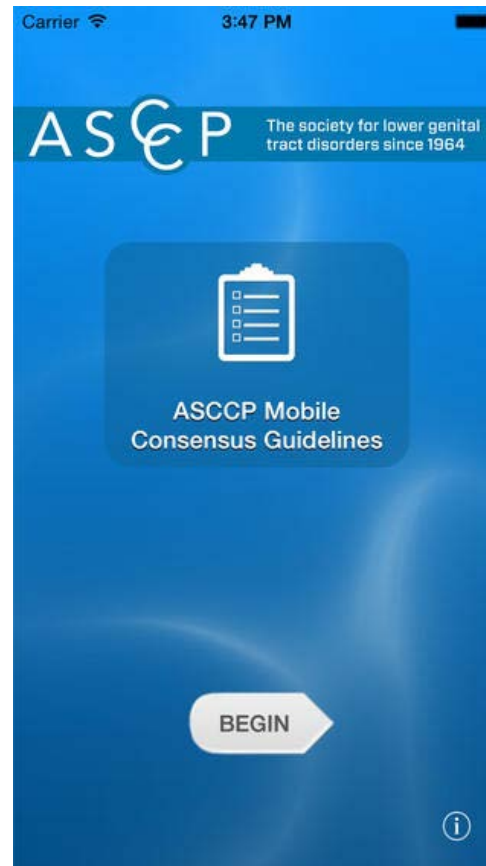
- ▶ Persistence of absent TZ in women age 30+
- ▶ Unsatisfactory cytology, HPV+ in women age 30+
- ▶ Persistence of HPV in women age 30+
- ▶ ASCUS, HPV+ in women age 30+
- ▶ LSIL, HSIL

Specialized Testing

- ▶ Dual-stained cytology (p16, Ki-67)
- ▶ HPV oncogene E6/E7 mRNA testing

The App

ASCCP Mobile Consensus Guidelines



The image shows the 'Patient Information' screen of the ASCCP Mobile Consensus Guidelines app. At the top, the status bar displays 'Carrier', signal strength, and the time '3:47 PM'. Below this is a blue header with the 'ASCCP' logo and the text 'The society for lower genital tract disorders since 1964'. The main content area is titled 'Patient Information' with a 'Home' link. It contains several input fields: 'Age:' with a text box, 'HPV Status:' with a dropdown menu showing '?', '-', and '+', and 'Pregnant:' with 'No' and 'Yes' buttons. Below these is a section titled 'Initial Testing Information' with a 'Cytology Result:' text box. A white 'NEXT' button is at the bottom. A small information icon (i) is located in the bottom right corner. The bottom navigation bar has three icons: 'Patient' (clipboard), 'Guidelines' (flowchart), and 'Definitions' (book).

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Questions?

