Boston Medical Center Maternity Care Guideline
Guideline: Pap smear Screening and Follow Up
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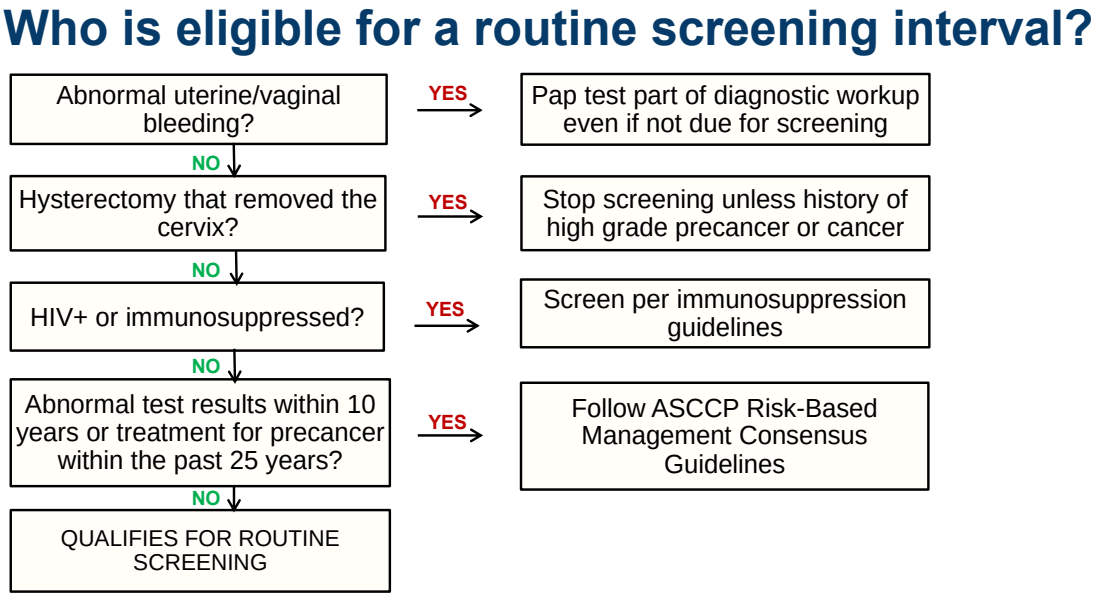
QUICK GUIDE TO SCREENING AND PAP ASSESSMENT



What is routine screening?
Cytology alone every 3 years ages 21-24
Cytology and HPV co-testing ages 25-65*
****Note: starting co-testing at 25 is consistent with ACS guidelines and simplifies screening and management***

Exit at age 65 only if meets criteria: *H/o adequate negative screening—defined as 3 consecutive negative cytology results or 2 consecutive negative co-tests within the last 10 years and most recent test occurring within the past 5 years, No current immunosuppression, No history of CIN2+ in past 25 years*

If your patient is HIV+/immunocompromised, skip to section IV.

HOW IS AN ABNORMAL PAP ASSESSED?

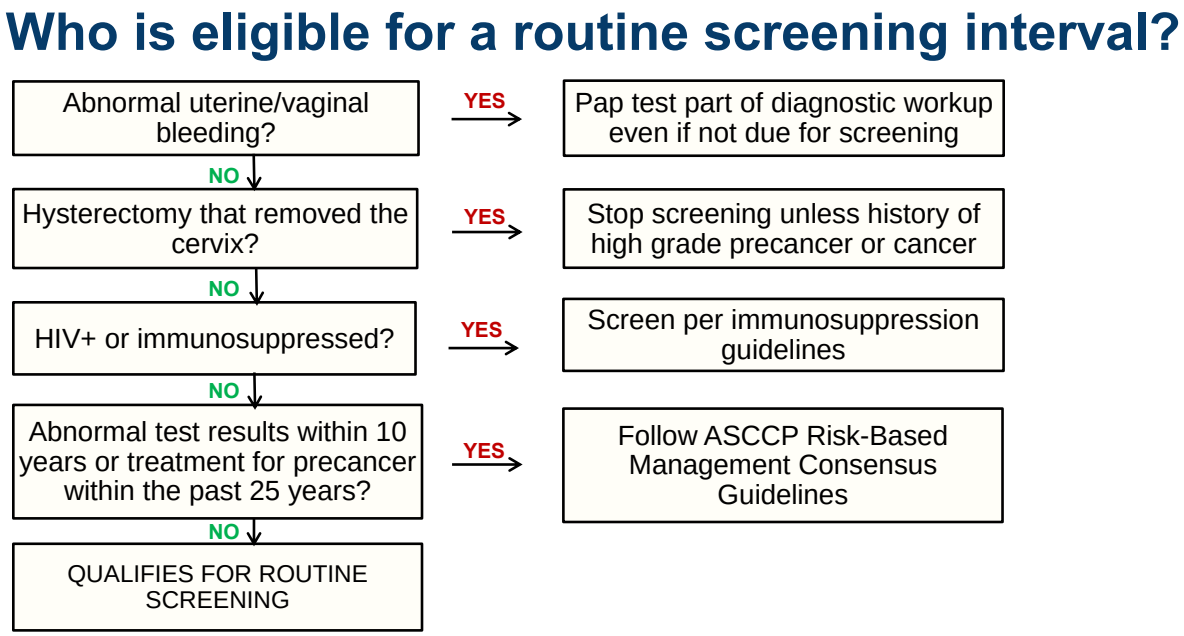
The best way to manage patients with abnormal results is with a clinical decision support tool. **BMC has its own FREE tool that you can use: https://www.bmc.org/hpv-pap-tests-and-vaccination** or use the ASCCP app or website (asccp.org/mobile-app)

The BMC tool has the management guidelines for providers but also was designed to be used by patients. Available in English and the Spanish version is coming soon. (currently Spanish can be found at the non-branded version of this website at cervical.risk.com)

Introduction

One in four individuals with a cervix (women and transgender men who have not undergone hysterectomy) will have an abnormal cervical cancer screening test during their lifetimes. Approximately 15,000 individuals in the United States are diagnosed with cervical cancer and 4300 die from cervical cancer every year. 20% of cervical cancers are diagnosed in individuals over the age of 65, most of whom did not have adequate screening before they stopped getting tests. Cervical cancer screening guidelines are improving to include both traditional Pap testing and HPV testing so that patients with normal results can safely be screened at longer intervals, and patients with abnormal results can be managed more precisely and safely. These guidelines represent the 2018 USPSTF[1] and 2020 ACS[2] screening guidelines and the 2019 ASCCP Risk-based management guidelines,[3] but distilled into what we hope is a more user-friendly document. Please note that at BMC we are using co-testing, except in age range 21-29 years old, so we are not discussing pap-only and HPV-only options.

Step 1. Determine if your patient is eligible for routine screening



What is routine screening?
Cytology alone every 3 years ages 21-29
Cytology and HPV co-testing ages 30-65

I. Screening exit recommendations:

65+ May exit screening ONLY if following criteria are met.

- *H/o adequate negative screening—defined as 3 consecutive negative cytology results or 2 consecutive negative co-tests within the last 10 years and most recent test occurring within the past 5 years*
- *No current immunosuppression*
- *No history of CIN2+ in past 20 years*

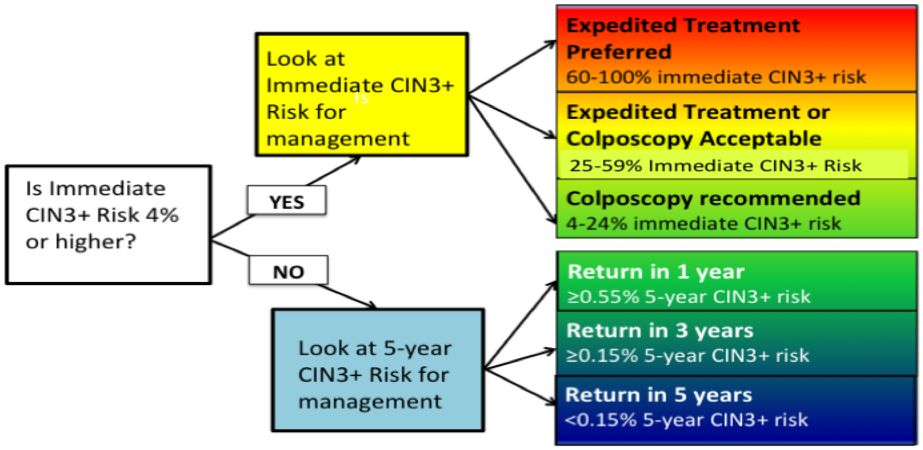
** Note: **20% of cervical cancers occur in individuals over 65, most of whom are unscreened or under screened**.)*
**However, If a patient is ill such that she would not undergo colpo or LEEP if needed, don't do the pap test*

**After screening is discontinued, do not resume screening even if patient has a new partner (only indication for Pap after discontinuation of screening is as workup of post-menopausal bleeding/abnormal vaginal discharge/mass)*

II. Management of Abnormal Results:

Management of abnormal results has changed significantly with the new guidelines. Patients are now managed based on their risk of CIN3+, which is based on both their current results and past screening history. The framework for understanding how patients are managed is below:

Figure 2. Summary of ASCCP Risk-Based Management Consensus Guidelines



The best way to manage patients with abnormal results is with a clinical decision support tool. **BMC has its own FREE tool that you can use: https://www.bmc.org/hpv-pap-tests-and-vaccination**
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You can also download the ASCCP app, or use the free ASCCP website at:
https://www.asccp.org/mobile-app

The table below is a quick summary of common results and how to manage them:

2019 ASCCP Risk-Based Management consensus guideline recommendations for management of common abnormalities

Current HPV Result	**Current Pap Test Result**	**Prior Results**	**Management by 2019 guidelines**
Negative	ASC-US	Unknown or HPV-negative[1]	Repeat HPV test with or without concurrent Pap test in 3 years
Negative	LSIL	Unknown or HPV-negative[1]	**Repeat HPV test with or without concurrent Pap test in 1 year**
Negative	ASC-H	Non-contributory	Colposcopy
Non-contributory	AGC	Non-contributory	Colposcopy with ECC and possible EMB *(see section A. "Other abnormal results" for details)*
Positive	NILM	Unknown or HPV-negative[1]	Repeat HPV test with or without concurrent Pap test in 1 year
Positive	NILM	HPV-positive[2]	Colposcopy
Positive for genotype HPV16 and/or HPV18	NILM	Non-contributory	Colposcopy
Positive for genotype HPV16 and/or HPV18	ASC-US or LSIL	Non-contributory	**Colposcopy**
Positive	ASC-US or LSIL	Unknown or HPV-positive	Colposcopy
Positive	ASC-US or LSIL	Negative screening results with HPV testing or HPV plus Pap testing within past 5 years	**Repeat HPV test with or without concurrent Pap test in 1 year[3]**
Positive	ASC-US or LSIL	Colposcopy confirming the absence of high-grade lesion within the past year	**Repeat HPV test with or without concurrent Pap test in 1 year[3]**
Positive	ASC-H	Non-contributory	**Colposcopy or expedited treatment**
Positive: untyped Positive: genotype other than HPV 16 Negative	HSIL	Non-contributory	Colposcopy or expedited treatment
Positive: genotype HPV16	HSIL	Non-contributory	**Expedited treatment**[4]

[1]Note colposcopy may be warranted for patients with a history of high-grade lesions (CIN2, CIN3, histologic or cytologic HSIL, ASC-H, AGC, AIS)

[2]Prior Pap results do not modify the recommendation; colposcopy is always recommended for 2 consecutive HPV-positive tests

[3]Negative HPV test or co-test (HPV plus Pap test) results only reduce risk sufficiently to defer colposcopy if performed for screening purposes within the last 5 years. Colposcopy is still warranted if negative HPV test or co-test results occurred in the context of surveillance for a prior abnormal result.

[4]Expedited treatment is preferred for non-pregnant patients aged 25 and older. Colposcopy with biopsy is an acceptable option if desired by patient after shared decision-making.

A. Other "Abnormal" Pap Results:

Unsatisfactory (i.e. insufficient cellularity) and HPV Negative or HPV not done	Repeat pap and HPV in 2-4 months taking sample twice (use 2 cytobrushes) ** If repeat pap unsatisfactory, refer to GYN to repeat pap; if GYN unable to obtain adequate specimen → colposcopy* **Lower cellularity specimens may be acceptable in patients who have undergone hysterectomy for malignancies, chemotherapy, or radiation therapy.*
Unsatisfactory (i.e. insufficient cellularity) and HPV+	Either repeat pap in two months or colposcopy **Note colposcopy recommended if positive for HPV 16 or 18/45*
Endometrial cells on a pap test	Post-menopausal patient → Endometrial biopsy Pre-menopausal patient → No action necessary
Absent transformation zone	Manage the same as if transformation zone is present
Atypical Glandular Cells	Age < 35 Colposcopy with ECC regardless of HPV status, Age 35+ or other risk factors for endometrial CA (e.g. morbid obesity, diabetes) endometrial biopsy in addition to colposcopy with ECC

B. Abnormal Pap and Biopsy Results during Pregnancy

ASCUS, HPV+ or LSIL	Management is the same whether pregnant or not. Colpo or re-test as indicated by past history (use Table or clinical decision support tool)
HSIL, ASC-H and AGC	Colposcopy every trimester during pregnancy, with biopsy if concerning for cancer
Colposcopy CIN1 or less	Repeat Pap/HPV post partum (at 1 year)
Colposcopy CIN2 or CIN3	Colposcopy every trimester during pregnancy, with biopsy if concerning for cancer; treatment post partum
AIS or cancer	Refer to Gyn Oncology

C. Abnormal pap tests, Age <25

ASCUS/HPV+ or LSIL or LSIL HPV+	Repeat Pap in 1 year; if repeat Pap ASCUS/ HPV+/LSIL or less, repeat in another year. If still ASCUS HPV+/LSIL at 2 years (or if becomes 25), refer for colposcopy **If unvaccinated, vaccinate for HPV regardless of pap or sexual history* *** If patient has a history of prior high-grade dysplasia, colposcopy should be performed rather than repeat Pap*
HSIL, ASC-H	Refer for colposcopy

III. Management after Colposcopy: Use ASCCP app or clinical decision support tool: https://www.bmc.org/hpv-pap-tests-and-vaccination

Pap before Colpo	Colpo result	Management Post Colpo
ASCUS/LSIL/NILM	CIN1 or less	1) Repeat Pap and HPV co-test in 1 year → then manage per app/website/table 2) Repeat this cycle annually until co-test is negative, then co-test q3 years for at least 7 years (even if >65) as their risk remains too high for a 5 year return
HSIL, ASC-H, AGC	CIN 1 or less	1) Repeat Pap (with HPV if 25+) and colposcopy in 6 months and 12 months 2) If remains with high grade Pap and low grade biopsies, consider diagnostic LEEP with ECC 3) If all pap and colposcopy revert to negative, co-test at 24 months→ if anything is abnormal repeat colposcopy. 3) If Pap/HPV remain negative, co-test q3 years for at least 20 years (even if >65)
Any	CIN2/3	LEEP* Then, for surveillance after the LEEP: 1) Co-test at 6 months, 18 months, 30 months (i.e. 3 in a row) from the time of LEEP, then every 3 years for at least 25 years. **Screening should continue even if the patient is over age 65 or if has a hysterectomy* 2) If anything is abnormal re-colpo **The only exception is ASCUS HPV neg which is a 1-year return**

**Patients with CIN2 desiring future children are eligible for observation with q6 month pap and colpo for up to 2 years*

**See pregnancy section for pregnancy-specific recommendations*

IV. Special populations – Screening recommendations:

A. HIV+[4] *:*

Pap test when

- Age 21
- *After 3 consecutive normal annual Paps* (or for HIV+ women 30+, 1 negative co-test)
- Every 3 years with Pap only if <30
- Every 3 years with co-test in 30+

Any abnormal cytology result or HPV+(x2) → colposcopy

B. Immunosuppressed (i.e., organ transplant, autoimmune disease on immunosuppressant medications)

- recommend HIV+ guidelines

C. DES Exposed:

- Annual paps without reflex to HPV (as long as they remain in good health—i.e. with life expectancy > 10 years) DES-exposed patients are at risk for vaginal cancer that is not caused by HPV.

D. Hysterectomy:

- Discontinue screening after total hysterectomy (i.e., cervix was removed) for benign disease (anything other than cancer or CIN2-3).
- If hysterectomy done for CIN 2-3, continue vaginal pap tests as recommended for LEEP follow-up (see below).

Logistical Practice for BMC and CHC providers

- Refer patients to General OBGYN using the E-portal or Epic Referral or Faxed referral form. If you do not have access to the E-portal, please fax the referral form to: 617-638-6756

- Follow up for CHC provider's needing colposcopy at BMC: The provider's office who performed the pap should call patients and tell them to expect a call from OB/ GYN Colpo Coordinator who will call the patient to schedule the appointment
- Results from the colposcopy will be sent back to the provider's office. The patient will be contacted (by the provider or nurse) with the results and the plan.
- If you have questions, call the Colpo Coordinator at 617-638-8048

Patient Education Materials

Materials will be sent to patient by BMC at time of booking with appointment letter
To learn more, go to: https://www.bmc.org/hpv-pap-tests-and-vaccination

Appendix

Table 1 – ACRONYMS

NILM	Negative for intraepithelial lesion or malignancy (i.e. NORMAL)
ASCUS	Atypical squamous cells of unknown significance
HPV+	HPV (high risk types) is present. [note that we never test for low risk HPV types as it is of no clinical relevance] At BMC, genotyping is done for HPV16, HPV18, and then HPV other. ***HPV 16/18/45*** refers to results at other institutions where the HPV genotype is specified. (16/18/45 are among the highest risk HPVs)
AGC	Atypical GLANDULAR cells of unknown significance. (This is NOT the same as ASCUS) (needs colpo regardless of HPV results, needs endometrial sampling based on risk factors and age.)
LSIL	(or LGSIL) low grade squamous intraepithelial lesion (minimally abnormal pap test)
HSIL	(or HGSIL) high grade squamous intraepithelial lesion
ASC-H	Atypical squamous cell, cannot rule out a high grade lesion.
Reflex HPV testing	Testing for HPV to triage management of the ASCUS Pap test. (ASCUS HPV+ is treated differently from ASCUS HPV-, see above)
Co-testing	Simultaneously running the liquid cytology specimen for BOTH Pap test interpretation as well as testing for the presence of HPV.

References:

1. US Preventive Services Task Force, Curry SJ, Krist AH, et al. Screening for Cervical Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2018;320(7):674-686. doi:10.1001/jama.2018.10897

2. Fontham ET, Wolf AM, Church TR, Etzioni R, Flowers CR, Herzig A, Guerra CE, Oeffinger KC, Shih YC, Walter LC, Kim JJ, Andrews KS, DeSantis C, Fedewa SA, Manassaram-Baptiste D, Saslow D, Wender R, Smith RA. Cervical Cancer Screening for Individuals at Average Risk: 2020 Guideline Update from the American Cancer Society. *CA Cancer J Clin*. 2020;in press.

3. Perkins RB, Guido RS, Castle PE, et al. 2019 ASCCP Risk-Based Management Consensus Guidelines for Abnormal Cervical Cancer Screening Tests and Cancer Precursors. *J Low Genit Tract Dis*. 2020;24(2):102-131. doi:10.1097/LGT.0000000000000525

4. US Department of Health and Human Services. Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV. Published online 2021. Accessed January 12, 2022 https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-opportunistic-infection/whats-new-guidelines