POLICY: PATHS Community Medical Centers are committed to providing quality health care that ensures the patients on-going health per the recommended national standards that are considered the gold standard for a particular area as well. It is also a commitment to contain unnecessary costs without sacrificing quality. To that end the protocol for screening for cervical cancer is listed below.

PERSONNEL: Chief Medical Officer, Providers, Clinical Support Staff

Introduction
Cervical cancer deaths in the United States have decreased dramatically since the implementation of widespread cervical cancer screening. Most cases of cervical cancer occur in women who have not been appropriately screened. Strategies that aim to ensure that all women are screened at the appropriate interval and receive adequate follow-up are most likely to be successful in further reducing cervical cancer incidence and mortality.

UDS Reporting Requirements: Cervical Cancer Screening
Percentage of women 21-64 years of age who received one or more tests to screen for cervical cancer.

Key Points (Recommendations)

- Screening for cervical cancer is not recommended in women younger than age 21 years.
- Screening for cervical cancer is recommended in women age 21 to 65 years with cytology (Pap smear) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years.
- Screening for cervical cancer is not recommended for women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer.
- Screening for cervical cancer is not recommended for women who have had a hysterectomy with removal of the cervix and who do not have a history of a high-grade precancerous lesion (cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer.
- Women treated in the past for CIN 2, CIN 3, or cancer remain at risk for at least 20 years after initial post treatment surveillance and should continue to have annual screening for at least 20 years.
- Women who have had a hysterectomy with removal of the cervix and have a history of CIN 2 or CIN 3 – or in whom a negative history cannot be documented should continue to be screened even after their period of post treatment surveillance. Whereas the screening interval may then be extended, there are no good data to support or refute discontinuing screening in this population.
• Screening for cervical cancer with HPV testing is not recommended for women younger than age 30 years.
• Screening with HPV testing alone is not recommended.
• Current evidence indicates that there are no clinically important difference in accuracy between liquid-based cytology and conventional cytology.
• Women who have received HPV vaccination should continue to be screened.
• Regardless of the frequency of cervical cytology screening, annual gynecologic examinations may still be appropriate even if cervical cytology is not performed at each visit.
• Annual screening of all sexually active women aged ≤25 years for chlamydial infection is recommended, as is screening of older women with risk factors (e.g., those who have a new sex partner or multiple sex partners).

Benefits of Detection and Early Intervention/Treatment

WOMEN YOUNGER THAN AGE 21 YEARS

• There is adequate evidence that screening women younger than age 21 years (regardless of sexual history) does not reduce cervical cancer incidence and mortality compared with beginning screening at age 21 years.

WOMEN AGE 21 TO 65 YEARS

• There is convincing evidence that screening women age 21 to 65 years with cytology every 3 years substantially reduces cervical cancer incidence and mortality.
• Among women age 30 to 65 years, there is adequate evidence that screening with a combination of cytology and HPV testing (co-testing) every 5 years provides benefits similar to those seen with cytology screening alone every 3 years.
  o Screening with HPV testing alone as an alternative to co-testing at 5-year intervals or cytology alone at 3-year intervals is not recommended.3
  o Positive screening results are more likely with HPV-based strategies than with cytology alone.
  o Some women may require prolonged surveillance with additional frequent testing if they have persistently positive HPV results.
• Among women younger than 30 years, there is adequate evidence that screening with HPV testing (alone or in combination with cytology) confers little to no benefit.

WOMEN OLDER THAN AGE 65 YEARS

• There is adequate evidence that screening women older than age 65 years who have had adequate prior screening and are not otherwise at high risk provides little to no benefits.

WOMEN AFTER HYSTERECTOMY

• There is convincing evidence that continued screening after hysterectomy with removal of the cervix for indications other than a high-grade precancerous lesion or cervical cancer provides no benefits.

Harms of Detection and Early Intervention/Treatment
Screening with cervical cytology or HPV testing can lead to harms:

- Abnormal test results can lead to more frequent testing and invasive diagnostic procedures, such as colposcopy and cervical biopsy. Evidence from randomized, controlled trials and observational studies indicates that harms from these diagnostic procedures include:
  1. Vaginal bleeding
  2. Pain
  3. Infection
  4. Failure to diagnose (due to inadequate sampling)
- Abnormal screening test results are also associated with mild psychological harms
- Cytology and HPV testing have been associated with
  1. Short-term increases in anxiety
  2. Distress
  3. Concern about health
- Some treatments for precancerous lesions (such as cold-knife conization and loop excision) are associated with adverse pregnancy outcomes, such as preterm delivery

### Age to Begin Screening

Cervical cancer screening should begin at age 21 years. Women aged younger than 21 years should not be screened regardless of the age of sexual initiation or other risk factors.

### Screening Interval and Timing

**WOMEN AGED 21 TO 29 YEARS**

- Screening with cytology alone every 3 years is recommended
- HPV testing should not be used to screen women in this age group, either as a stand-alone test or as a co-test with cytology.

**WOMEN AGED 30 TO 65 YEARS**

- Screening with cytology and HPV testing (“co-testing”) every 5 years (preferred) or cytology alone every 3 years (acceptable).

**WOMEN OLDER THAN AGE 65 YEARS**

- Screening women older than age 65 years who have had adequate prior screening and are not otherwise at high risk is not recommended.
  - Current guidelines define adequate screening as 3 consecutive negative cytology results or 2 consecutive negative HPV results within 10 years before cessation of screening, with the most recent test performed within 5 years.
- Screening should not resume after cessation in women older than age 65 years, even if a woman reports having a new sexual partner.
• Routine screening should continue for at least 20 years after spontaneous regression or appropriate management of a high-grade precancerous lesion, even if this extends screening past age 65 years.
• Screening may be clinically indicated in older women for whom the adequacy of prior screening cannot be accurately accessed or documented.
• Screening previously unscreened women every 2 to 5 years and ending at age 70 to 75 years represent reasonable tradeoffs between benefits and harms.
• Certain considerations may support screening in women older than age 65 years who are otherwise considered high risk, including women:
  1. With a high-grade precancerous lesion or cervical cancer
  2. Within utero exposure to diethylstilbestrol
  3. Who are immunocompromised

**Assessment of Risk**

• It is well established that HPV infection is associated with nearly all cases of cervical cancer.
• Other factors that put a woman at increased risk of cervical cancer include:
  1. HIV Infection
  2. A compromised immune system
  3. In utero exposure to diethylstilbestrol
  4. Previous treatment of a high-grade precancerous lesion or cervical cancer
• Women who had their cervix removed during surgery for ovarian or endometrial cancer are not at high risk for cervical cancer and would not benefit from screening. Clinicians should confirm through review of surgical records or direct examination that the cervix was removed.

**Treatment**

• Screening aims to identify high grade precancerous cervical lesions to prevent development of cervical cancer and early stage asymptomatic invasive cervical cancer.
• The treatment of precancerous rather than early-stage cancerous lesions is unique to cervical cancer and is the foundation of the success of cervical cancer screening. Treatment of precancerous lesions is less invasive than treatment of cancer and results in fewer adverse effects.
• High-grade lesions may be treated with ablative and excisional therapies, including cryotherapy, laser ablation, loop excision, and cold-knife conization.
• Early-stage cervical cancer may be treated with surgery (hysterectomy) or chemo-radiation.

**Cervical Cytology Specimen Adequacy**

*UNSATISFACTORY FOR EVALUATION*
Repeat test in two to four months 2

INADEQUATE EC/TZ (ENDOCERVICAL CELL/TRANSFORMATION ZONE) COMPONENT

- For most women, repeat cervical cytology test in 12 months
- Repeat cervical cytology in six months in the following situations:
  1. Previous cervical cytology test result of ASC-US or worse without two subsequent negative cervical cytology tests or a subsequent negative HPV test
  2. Previous cervical cytology test with an unexplained glandular abnormality
  3. A positive test for a high risk HPV strain within the previous 12 months
  4. Inability to clearly visualize or sample the endocervical canal
  5. Similar obscuring factor in consecutive Pap tests
  6. Insufficient frequency of previous screening

Cervical Cytology Abnormalities

SQUAMOUS CELL ABNORMALITIES

- ASC Atypical squamous cells
- ASC-US Atypical squamous cells of undetermined significance
- ASC-H Atypical squamous cells: cannot exclude a high-grade squamous intraepithelial lesion
- LSIL Low-grade squamous intraepithelial lesion; includes changes consistent with HPV, mild dysplasia, or CIN 1 (grade 1 cervical intraepithelial neoplasia)
- HSIL High-grade squamous intraepithelial lesion; includes changes consistent with moderate or severe dysplasia, CIN 2 or 3, and carcinoma in situ

GLANDULAR CELL ABNORMALITIES

- AGC Atypical glandular cells. Endocervical, endometrial, or not otherwise specified is noted.
- Atypical glandular cells, favor neoplastic. Endocervical or not otherwise specified is noted. Show features suggestive of, but not sufficient for an interpretation of adenocarcinoma.
- AIS Endocervical adenocarcinoma in situ
- Adenocarcinoma

Management of Abnormal Cervical Cytology

POSITIVE HPV TEST AND NEGATIVE CYTOLOGY

- Direct referral to colposcopy not recommended
- Testing for individual HPV genotypes other than HPV16 and HPV18 not recommended
- Repeat co-testing at 12 months

1. Refer to colposcopy if

   - HPV test results remain positive
OR Cytology shows LSIL or more severe abnormality

2. Return to routine screening if
   - HPV test results negative
   - AND Cytology ASC-US or negative

   • OR Immediate HPV genotype-specific testing for HPV 16 alone or for HPV16/18
     1. Refer directly to colposcopy if
        ➢ HPV16 or HPV16/18 results positive
     2. Repeat co-testing at 12 months if
        ➢ HPV16 or HPV16/18 results negative

**NEGATIVE HPV TEST AND ATYPICAL SQUAMOUS CELLS (ASC-US) CYTOLOGY**

• Continue with routine screening as per age-specific guidelines

**HPV-POSITIVE, ASC-US OR ABNORMAL CYTOLOGY MORE SEVERE THAN ASC-US (LSIL OR MORE SEVERE)**

• Refer to colposcopy

**Recommendations of Others**

**ACS/ASCCP/ASCP(2012)**

• Recommends women age 21 to 29 years be screened with cytology (cervical cytology testing or Pap testing) alone every 3 years.
• Women age 30 to 65 years should be screened with cytology and HPV testing (co-testing) every 5 years or cytology alone every 3 years.
• No woman should be screened every year
• Women age 21 to 29 years should not be screened with HPV testing or combined cytology and HPV testing.

**American College of Obstetricians and Gynecologists**

• Evaluating new evidence, include recommendations on screening for cervical cancer from the USPSTF

**Academy of Family Physicians**

• Evaluating new evidence, include recommendations on screening for cervical cancer from the USPSTF
Inadequate EC/TZ (Endocervical Cell/Transformation Zone) Component

Patient with risk factors for cervical cancer? *

NO → Repeat cervical cytology test in 12 months

YES → Repeat cervical cytology test in six months

* Repeat cervical cytology in six months in the following situations:
  - Previous cervical cytology test result of ASC-US or worse without two subsequent negative cervical cytology tests or a subsequent negative HPV test
  - Previous cervical cytology test with an unexplained glandular abnormality
  - A positive test for a high risk HPV strain within the previous 12 months
  - Inability to clearly visualize or sample the endocervical canal
  - Similar obscuring factor in consecutive Pap tests
  - Insufficient frequency of previous screening

Unsatisfactory for Evaluation

Repeat test in two to four months
CREENING FOR CERVICAL CANCER
WEBSITE RESOURCES – FOR PATIENTS

1. Cervical Cancer Screening Centers for Disease Control and Prevention
   http://www.cdc.gov/cancer/cervical/basic_info/screening.htm

2. Get Tested for Cervical Cancer
   www.healthfinder.gov

3. Cervical Cancer Screening (PDQ®) National Cancer Institute
   http://www.cancer.gov/cancertopics/pdq/screening/cervical/Patient

REFERENCES:

SIGNATURES:

__________________________________________  _________________________________
Chief Executive Officer                       Date

__________________________________________  _________________________________
Chief Medical Officer                         Date