



បន្ទីរមន្ទីរជាតិគាំពារមាតា និងទារក
National Maternal and Child Health Center

ទិវាសល្យសាស្ត្រ សម្ព័ន្ធ និងរោគស្រ្តី លើកទី៣

ប្រធានបទ: «ពង្រឹង និងបង្កើនសេវាព្យាបាល ថែទាំ សង្គ្រោះ ប្រកបដោយគុណភាព»

INTERGRATING OF HPV TESTING IN CERVICAL CANCER SCREENING AT NMCHC



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ថ្ងៃទី៤-៥ ខែកញ្ញា ឆ្នាំ២០២៥
សណ្ឋាគារភ្នំពេញ

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I. Objectives

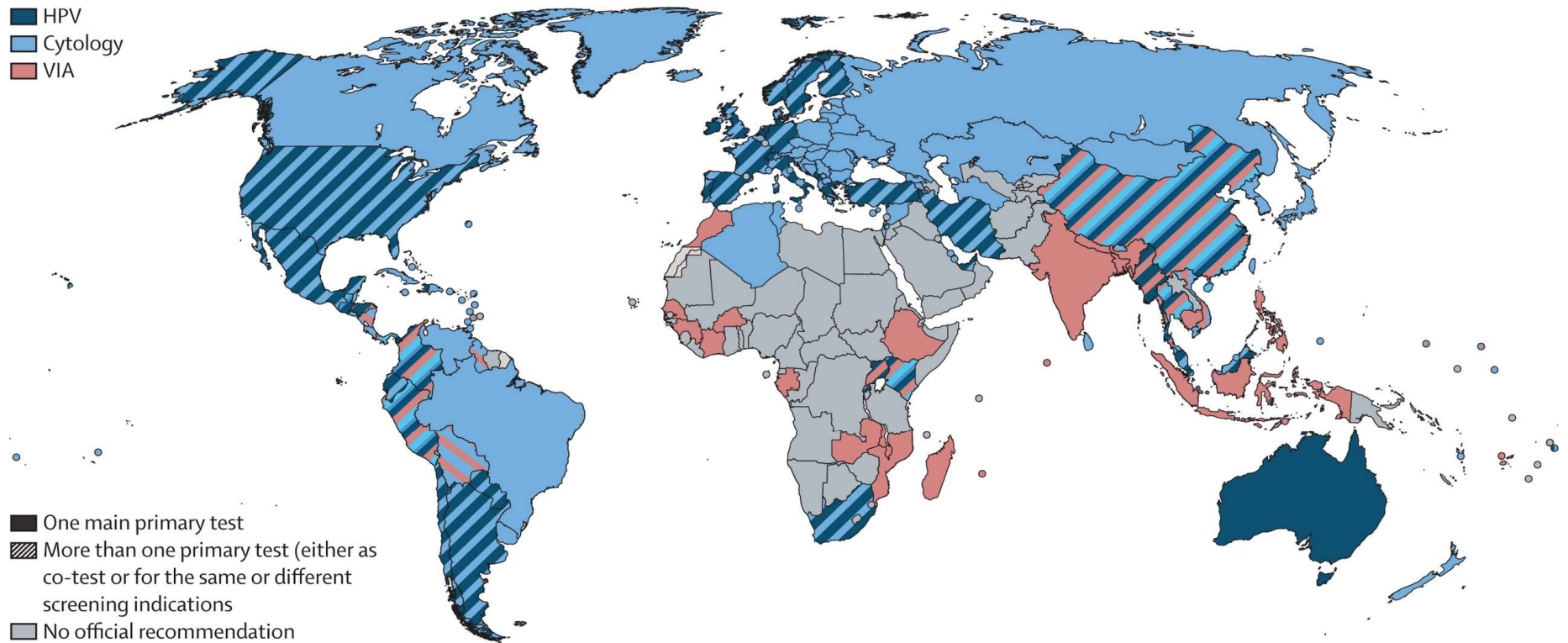
1. The Current status of outpatient gynecological Consultation at NMCHC
2. Conducting Cervical Cancer Screening According to proper procedures of policies of MOH
3. Increase Collaboration and Work Quality for better efficiency

II. Introduction

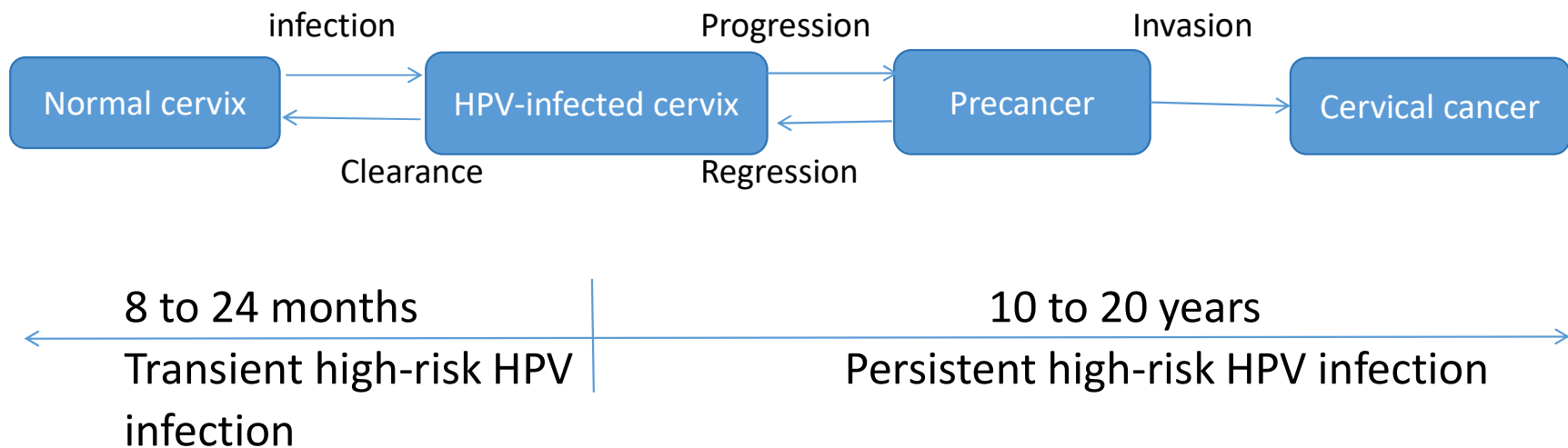
- Cervical cancer is a major public health issue, especially in low- and middle-income countries.
- Cervical cancer is the 4th most common cancer among women.
- In Cambodia, cervical cancer is the second most common cancer in women with 1 135 new cases and 643 deaths in 2023.
- It is related to persistent HPV infection.
- Early detection through effective screening can prevent most cases.

Official recommended tests for primary cervical cancer screening

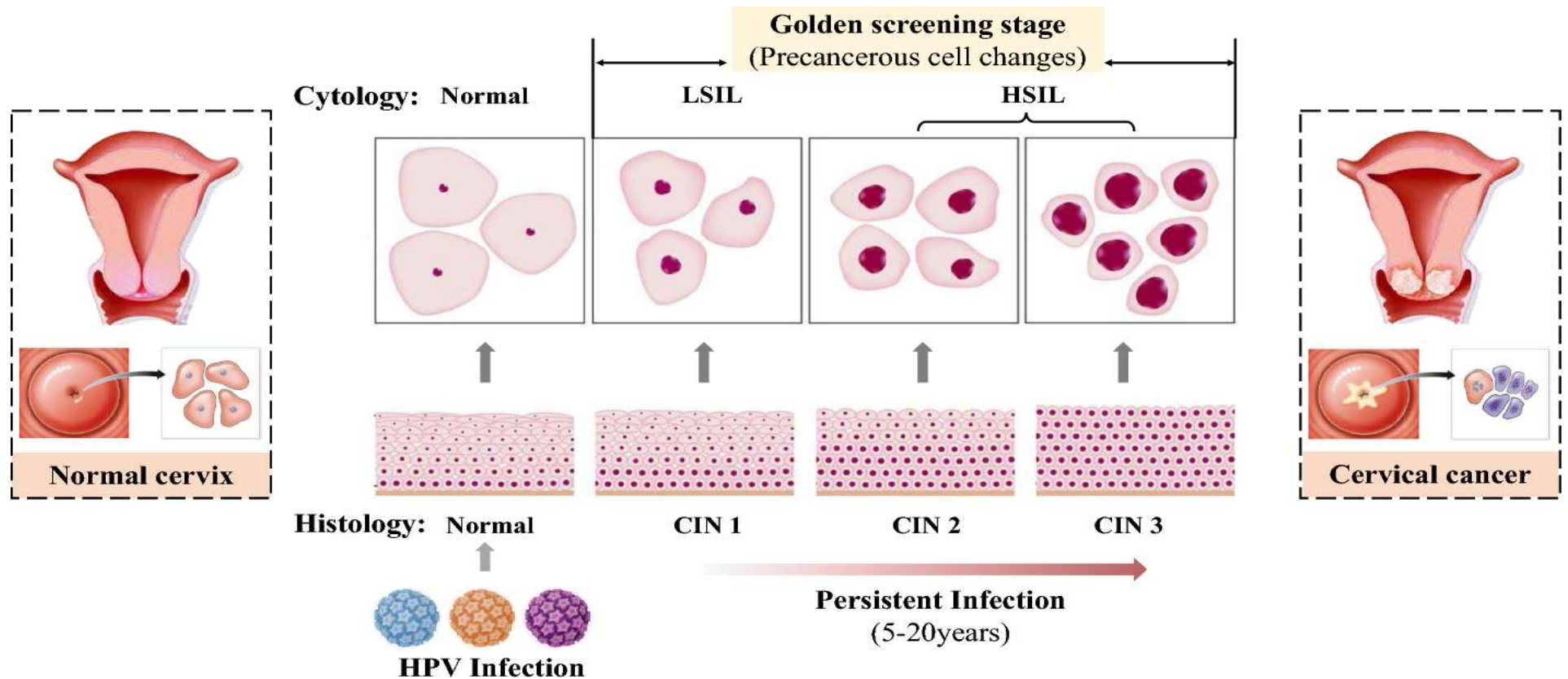
- HPV
- Cytology
- VIA



III. Natural history of cervical cancer



III. Natural evolution of HPV infected cervical cancer



IV. WHO Goal

- **90-70-90 Targets by 2030:**
 - 90% of girls fully vaccinated with HPV vaccine by age 15
 - 70% of women screened with a high performance test by age 35 and again by 45.
 - 90% of women with pre-cancer or cancer receive treatment.

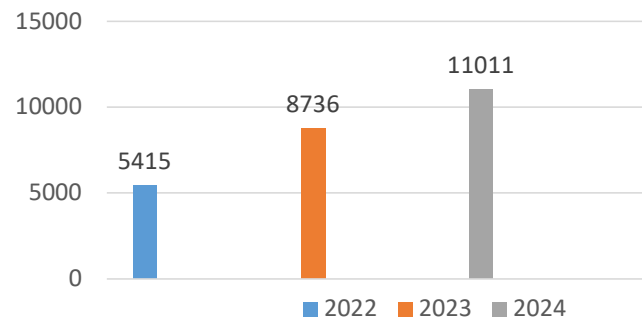
IV. Strategies Framework for cervical cancer prevention and control

Primary prevention	Secondary prevention	Tertiary
<ul style="list-style-type: none">- HPV vaccination- Education (use condom, avoid tobacco use, delay age of first sexual intercourse)	<ul style="list-style-type: none">- Screening: identify and treat precancerous lesions before they progress to cervical cancer- Early diagnosis (reduce cervical cancer mortality)	<ul style="list-style-type: none">- Treatment & palliative care

V. History of cervical screening at NMCHC



Number of outpatient gynecological Consultation



V. History of cervical cancer screening at NMCHC

❖ 3 main ways to screen for cervical cancer:

- Visual inspection with acetic acid (VIA)
- HPV testing
- Conventional Cytology (Pap Smear)

V. History of cervical screening at NMCHC (Cont.)

Visual inspection with acetic acid (VIA)

- MOH policy 2008
- Start phase 2015
- We did not perform screen and treat approach.

V. History of cervical screening at NMCHC (Cont.)

Conventional Cytology (Pap Smear)

- ▶ Start up phase

 - Training team (1 Ob-gyn and 1 Lab technician): 2000-2002 (UHS, Thai, Japan)

- ▶ Implementation phase in 2003 at NMCHC

V. History of cervical screening at NMCHC (Cont.)

Cervical cancer early Diagnosis and treatment

(program for integrational promotion of Japan healthcare)

- Start up 2015
- General management (SCGO, JSOG, MOH)
- 3 sites: NMCHC , Calmette, KSFH
- Monitoring and evaluation:
 - Pap smear - colposcopy - treatment
 - Pap smear - colposcopy – Histology - treatment

V. History of cervical screening at NMCHC (Cont.)

HPV DNA Screen and self sampling

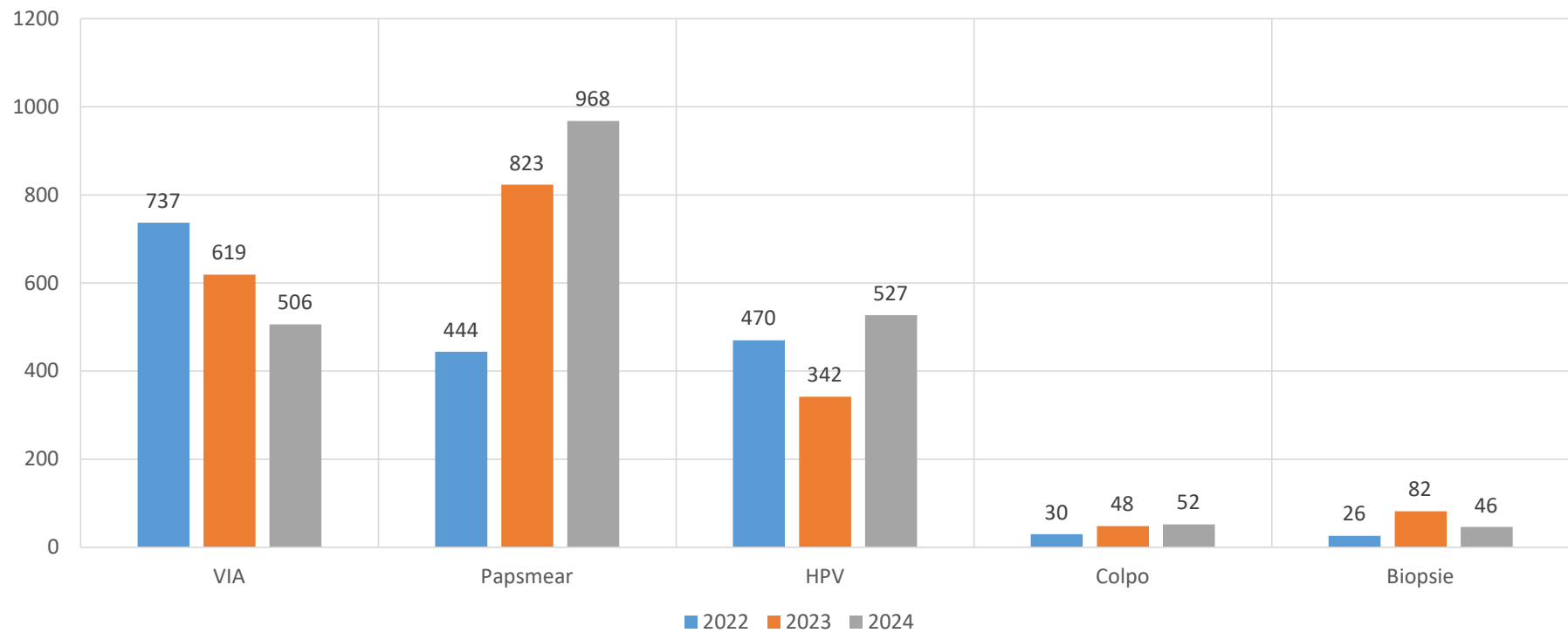
- Start up & implementation 2017
- Collaborative project in introducing HPV-based screening, starting from health education.

V. History of cervical screening at NMCHC (Cont.)

Pathology

- Before 2020 MoU with UHS
- Start up in 2018 (Japan and Calmette)
- Implementation 2020 (Histology department)

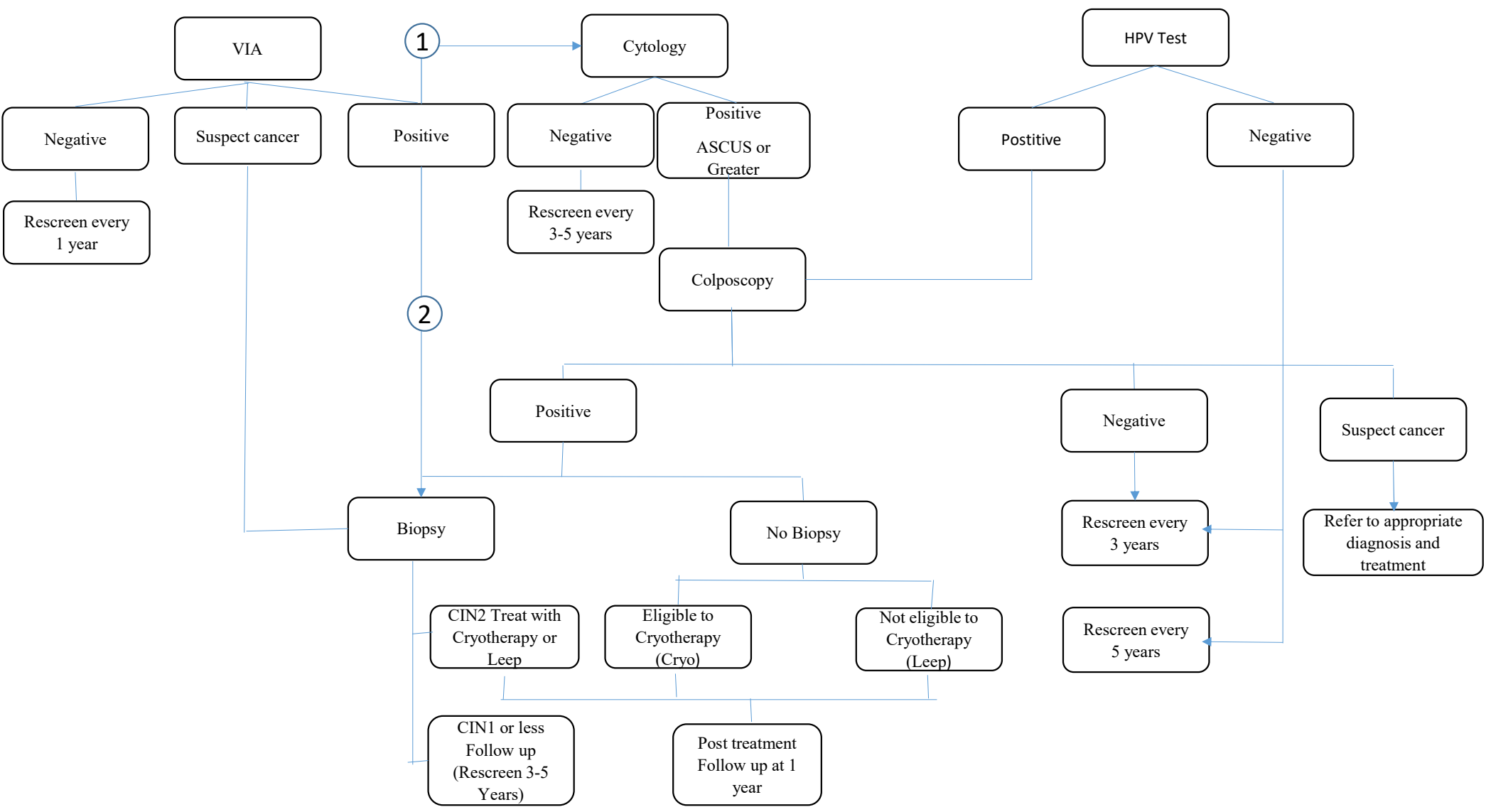
V. History of cervical screening at NMCHC (Cont.)



V. History of cervical screening at NMCHC (Cont.)

Result of Pap Smear 2024

Result of Pap Smear	Number of patient	Percentage, %	
Unsatisfactory	17	1.75%	
NILM	907	93.70%	
ASC-H	5	0.57%	Number of patients 44 are percentage 4.54% (ABNORMAL)
ASC-US	33	3.41%	
HSIL	1	0.10%	
LSIL	1	0.107%	
SCC	4	0.41%	



1

2

VI. Decision Problem (Pap Smear & VIA)

Conventional Cytology (Pap Smear)

- Unsatisfactory 17 patients=1.75%, so need to redo Test
- Result abnormal 44 patients=4.54%, need to additional test
Colposcopy and HPV test
- False positive or negative
 - False positive leading to unnecessary biopsy or follow up
 - False negative inadequate cell collection (blood, mucus) miss abnormal cell
delay -diagnosis and treatment
- Over diagnosis :abnormal pap smear but not progress to Cancer
- Needs Personal and Lab Skill

VI. Decision Problem (Pap Smear & VIA Cont..)

Visual inspection with acetic acid (VIA)

- No permanent Record
- Unreliable for post menopause
- Lower Specificity-Higher rate of false positives
- Need Personnel perform procedure Skill

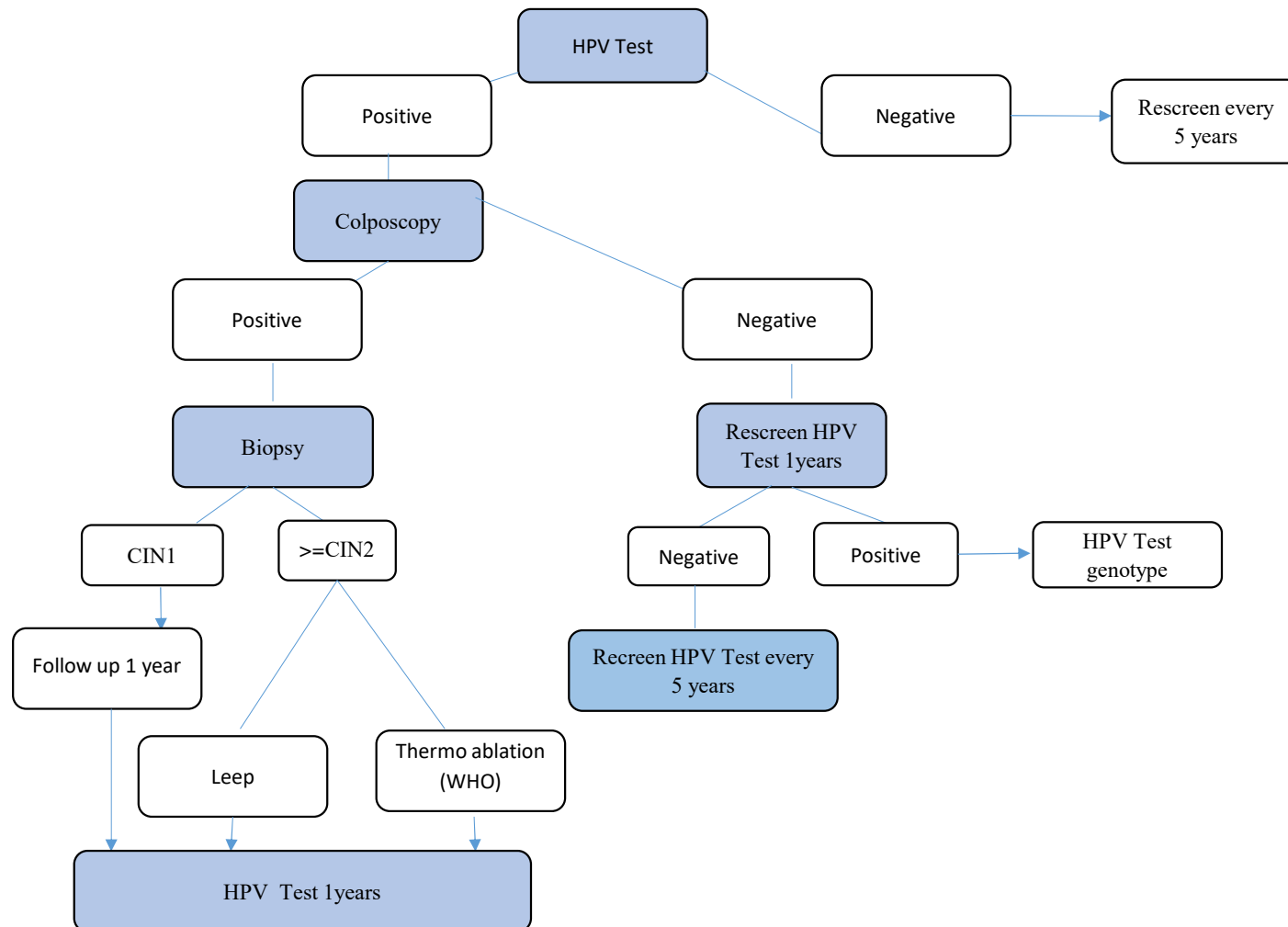
VI. Decision Problem (Pap Smear & VIA Cont.)

Screening Test	Sensitivity	Specificity
Cytology Conventional (Pap smear)	44% -78%	91%-96%
Visual Inspection Method (VIA)	62%-73%	86%-87%
HPV DNA Testing	56%-100%	61%-96%

VII. Why HPV Testing?

- More sensitive than Pap smear or VIA.
- Detects high risk HPV types that cause cervical cancer.
- Enables longer screening intervals (5-10 years).
- Objective and less dependent on provider skills.

Algorithm: Primary HPV screening



VIII. Key messages

- Cervical cancer ← persistent infection with high risk types of HPV.
- High sensitivity of HPV testing → improve the effectiveness of cervical cancer screening → reduce cervical cancer mortality.
- HPV testing → Early detection before cell change.

IX. REFERENCES

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- Cervical cancer research notebook
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- Cervical cancer elimination, UNFPA, CAMBODIA, Country review roadmap for action, December 2021
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Thank YOU