



Secondary Prevention of Cervical Cancer

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Background



- Cervical cancer develops in a woman's cervix (the entrance to the uterus from the vagina).
- **Almost all** cervical cancer cases (99%) are linked to infection with high-risk **human papillomaviruses (HPV)**, an extremely common virus **transmitted through sexual contact**.
- Although most infections with HPV resolve spontaneously and cause no symptoms, **persistent infection can cause cervical cancer** in women.
- Cervical cancer is the **fourth most common cancer** in women. In 2018, an estimated 570,000 women were diagnosed with cervical cancer worldwide and about 311,000 women died from the disease.



- Effective primary (**HPV vaccination**) and secondary prevention approaches (**screening for, and treating precancerous lesions**) will prevent most cervical cancer cases.
- When diagnosed, cervical cancer is **one of the most successfully treatable forms of cancer**, as long as it is **detected early and managed effectively**.
- With a **comprehensive approach** to prevent, screen and treat, cervical cancer can be eliminated as a public health problem within a generation.

Global strategy to accelerate the elimination of cervical cancer as a public health problem (May 2018)



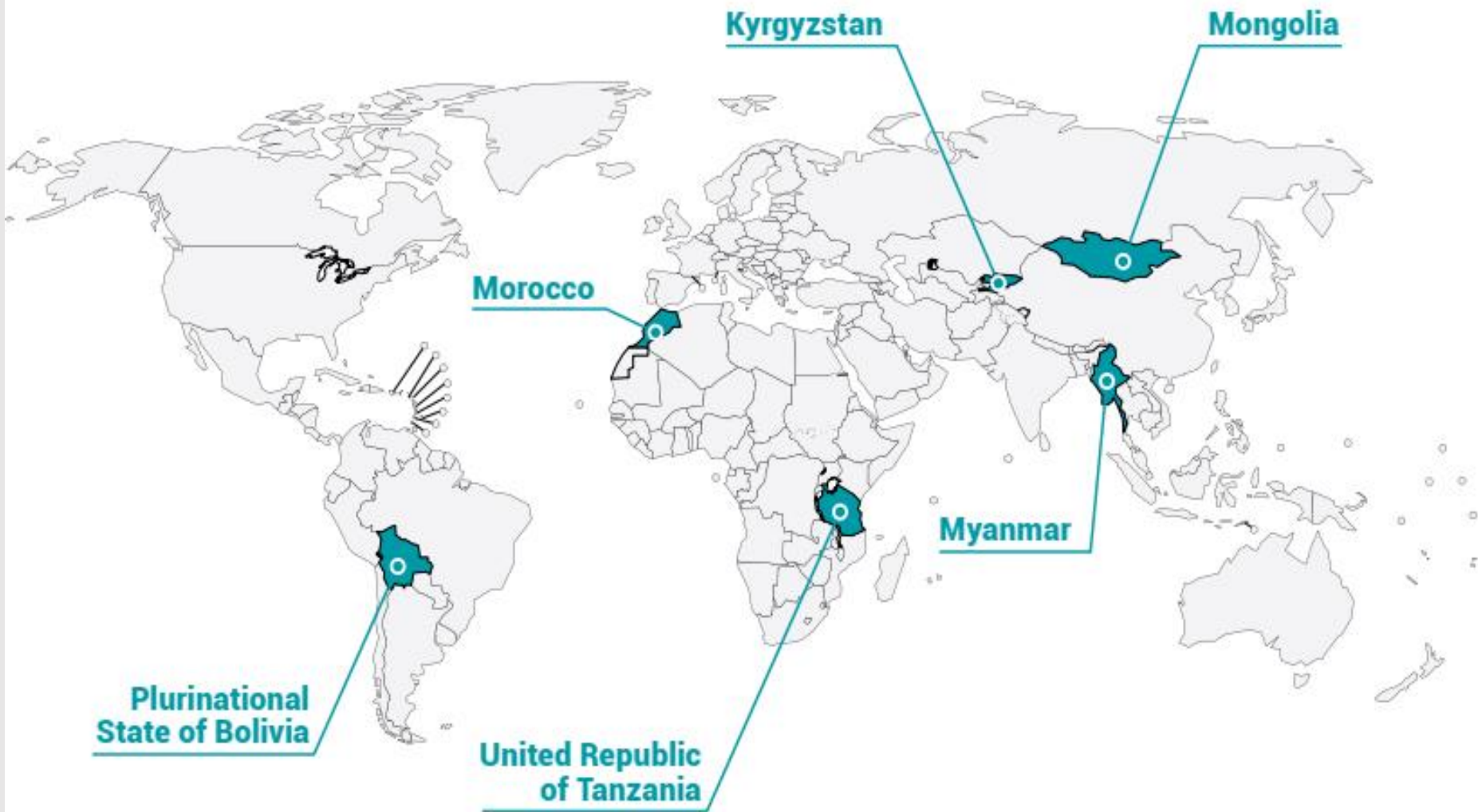
- **No woman should die from cervical cancer.** We have the technical, medical and policy tools and approaches to eliminate it. The burden of cervical cancer falls on the women who lack access to health services, mainly in low-and middle income countries.
- In May 2018, the Director-General of the World Health Organization announced a **global call to action towards the elimination of cervical cancer**, underscoring renewed political will to make elimination a reality, and called for all stakeholders to unite behind this common goal.



Myanmar

- Cervical cancer is leading cause of cancer deaths for women
- Annually 500 new cervical cancer cases come to Central Women Hospital (Yangon)
- WHO estimates 3,5000 deaths are due to cervical cancer
- Myanmar is one of the countries selected by UN Joint Global Program in elimination of cervical cancer as public health problem

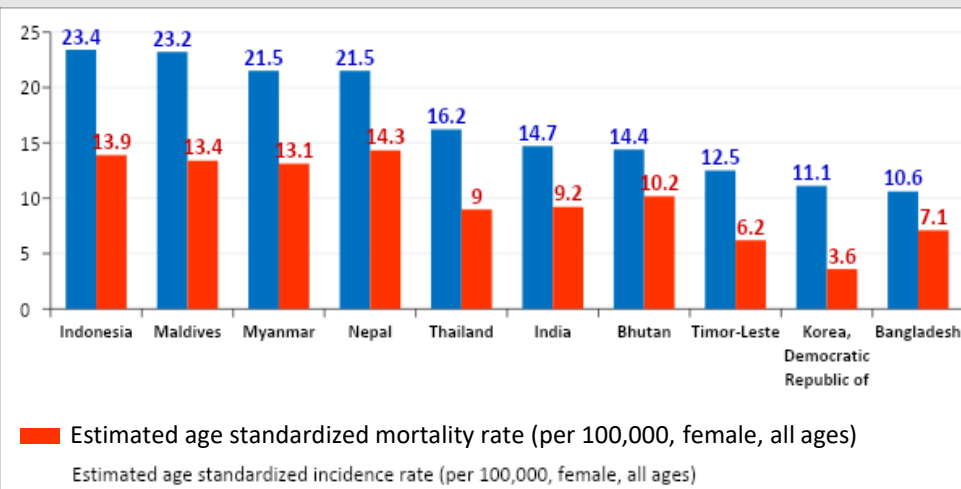
Initial countries that are partners of the Joint Programme



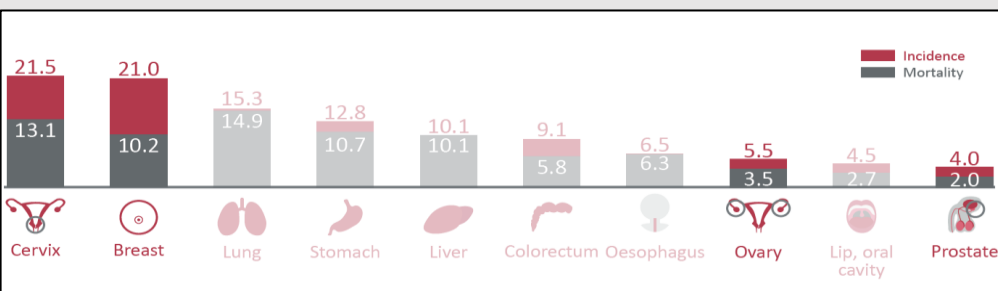
CERVICAL CANCER SITUATION IN MYANMAR



Cervical Cancer in South East Asia



Top 10 Cancers in Myanmar



Cervical cancer age standardized incidence rate estimated at **21.5/100,000** female population per year

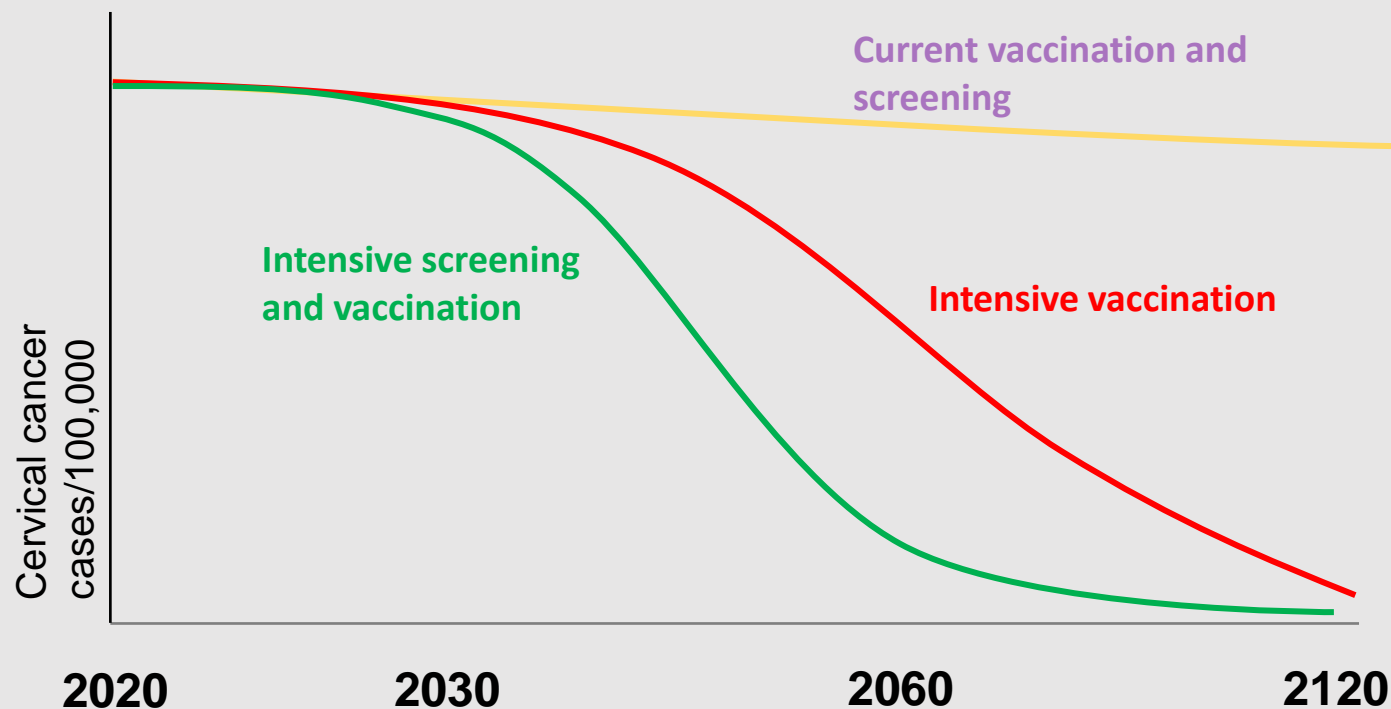
Age standardized mortality rate at **13.1/100,000** female population per year (0.2 % of total cancer mortality in Myanmar)

More than **50%** of women with cervical cancer died from cervical cancer each year

In 2018, (estimated) **6,472** women are diagnosed with cervical cancer and **3,856** dies from the disease

Source: GLOBOCAN 2018

CERVICAL CANCER ELIMINATION: CONCEPTUAL FRAMEWORK



THE ARCHITECTURE TO ELIMINATE CERVICAL CANCER:



VISION: A world without cervical cancer

THRESHOLD: All countries to reach < 4 cases 100,000 women-years

2030 CONTROL TARGETS

90%

of girls fully vaccinated
with HPV vaccine by 15
years of age

70%

of women screened
with an high precision
test at 35 and 45 years
of age

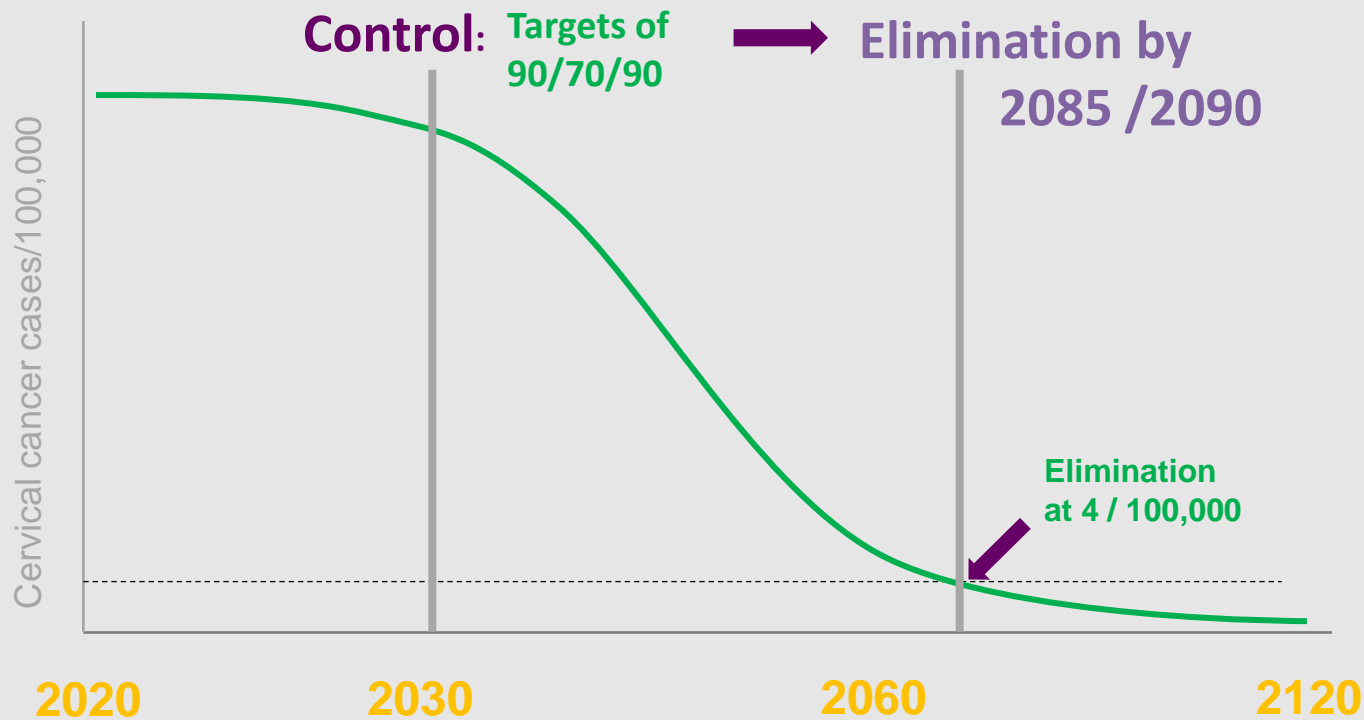
90%

of women identified with
cervical disease receive
treatment and care

SDG 2030: Target 3.4 – 30% reduction in mortality from cervical cancer

The 2030 targets and elimination threshold are subject to revision depending on the outcomes of the modeling and the WHO approval process

INCREASING ACCESS TO INTERVENTIONS 2030 VACCINATION, SCREENING & TREATMENT COVERAGE TARGETS



TARGET POPULATION FOR SCREENING IN MYANMAR



- Total: 51.5 million
- Reproductive age: 35.1million
(59%)
- 30-49 yrs women-7.6 million
- 70% reside in rural areas



SCREENING PLAN IN MYANMAR



- Type of screening programme : Population based screening
- Year of initiation: Planned in 2019
- Eligible age for screening: Women aged between 30-49 years
- Screening method(s): Hybrid approach:

HPV testing in rural areas and VIA in urban settings

- Average screen-positive rate: 7-14%
- Estimated screening coverage : 1 % for both urban and rural area; 7% for urban area

SCREENING PLAN IN MYANMAR



Number of sites offering screening:

- Tertiary – secondary - PHC level –community level

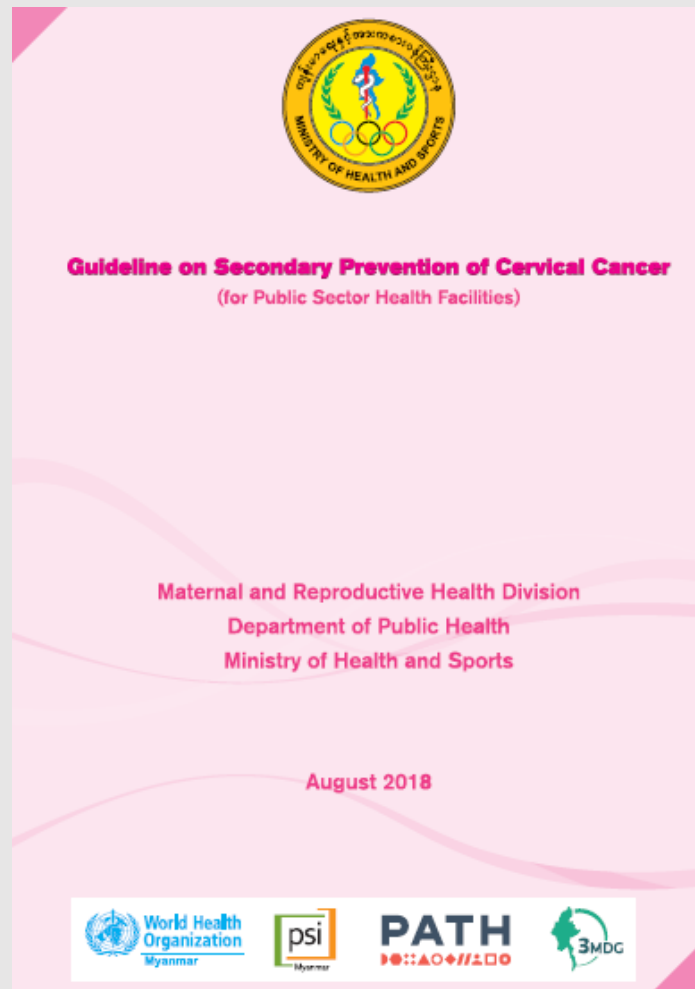
Who administer the screening tests :

- Midwives and AMWs in rural setting (HPV test) and medical doctors in urban setting (VIA)

Availability and practicing screening guidelines with algorithms:

- Technical Guideline for Secondary Prevention of Cervical Cancer (for public sector health facilities) published in 2018.
- Development of National Operational Plan and Costing – In hand

Guideline on Secondary Prevention of Cervical Cancer for Public Sector Health Facilities





- Specific training packages for screening and treatment of precancer
 - Ready
- **TOT done (virtually) in (1st to 3rd December)**
- Integration of screening with other services – with NCD control and maternal reproductive health service

HEALTH SYSTEM SUPPORT FOR SCREENING IN MYANMAR



- Availability of laboratory facilities - Funding source for screening programs – mainly from **MOHS**
- User fee for clients – women will be screened **FOC for one-time** in this current program
- Partners involved – **WHO, PATH, Access to Health Fund, CHAI, MSI, PSI, MMCWA, Shwe Yaung Hnin Si Cancer Foundation, KOICA**

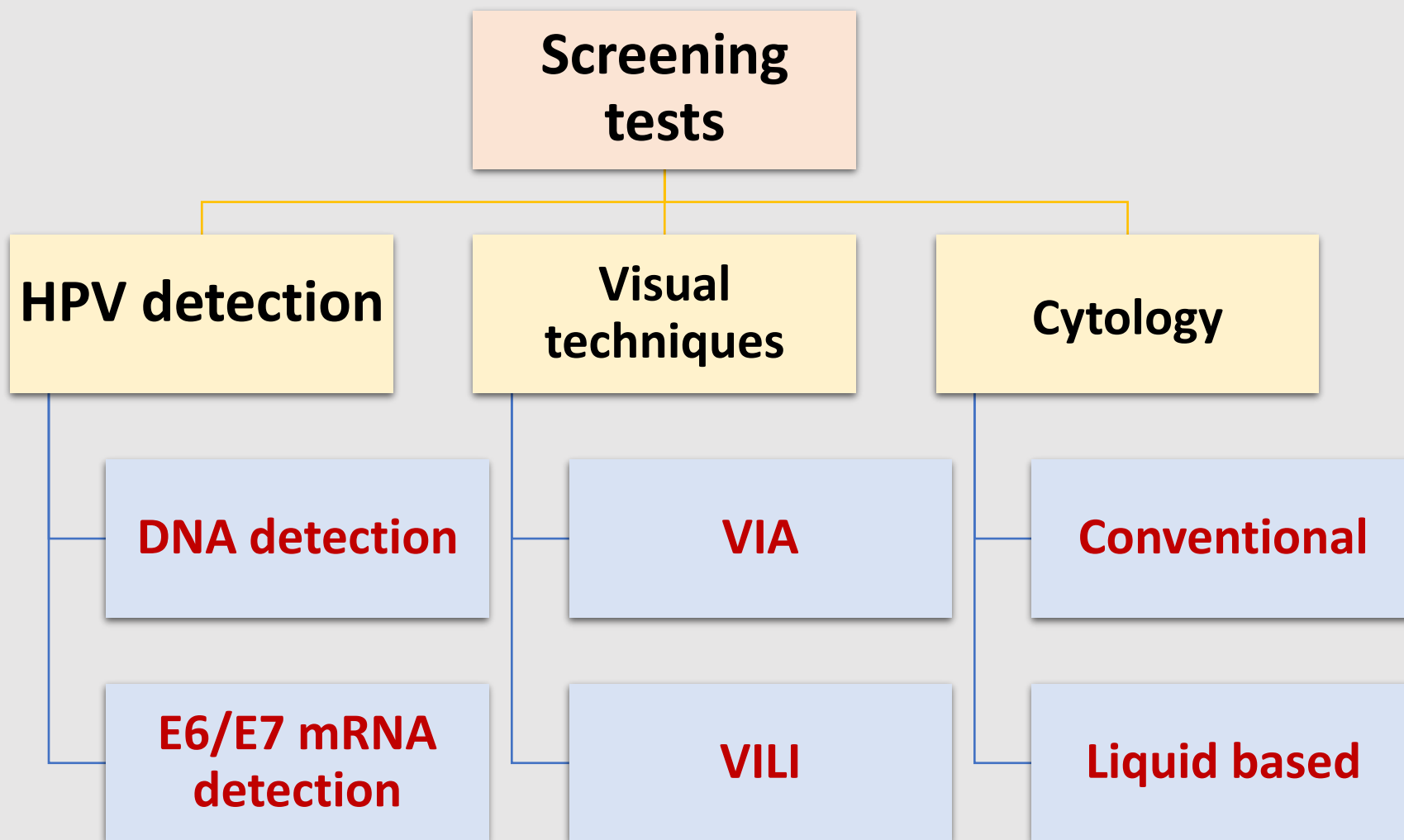


Planned Pilot Project Areas (15 Townships)



Shan (South)	Shan (North)	Yangon
Liolem	Lashio	Inn Sein
Le Char	Kyauk Me	Hlaing Thar Yar
Kyae Thee	Hsipaw	
Mai Kai	Kauk Kai	
Mai Shu	Tant Yan	
Kun Hein	Mai Yal	
Nam san		

SCREENING TESTS FOR CERVICAL CANCER



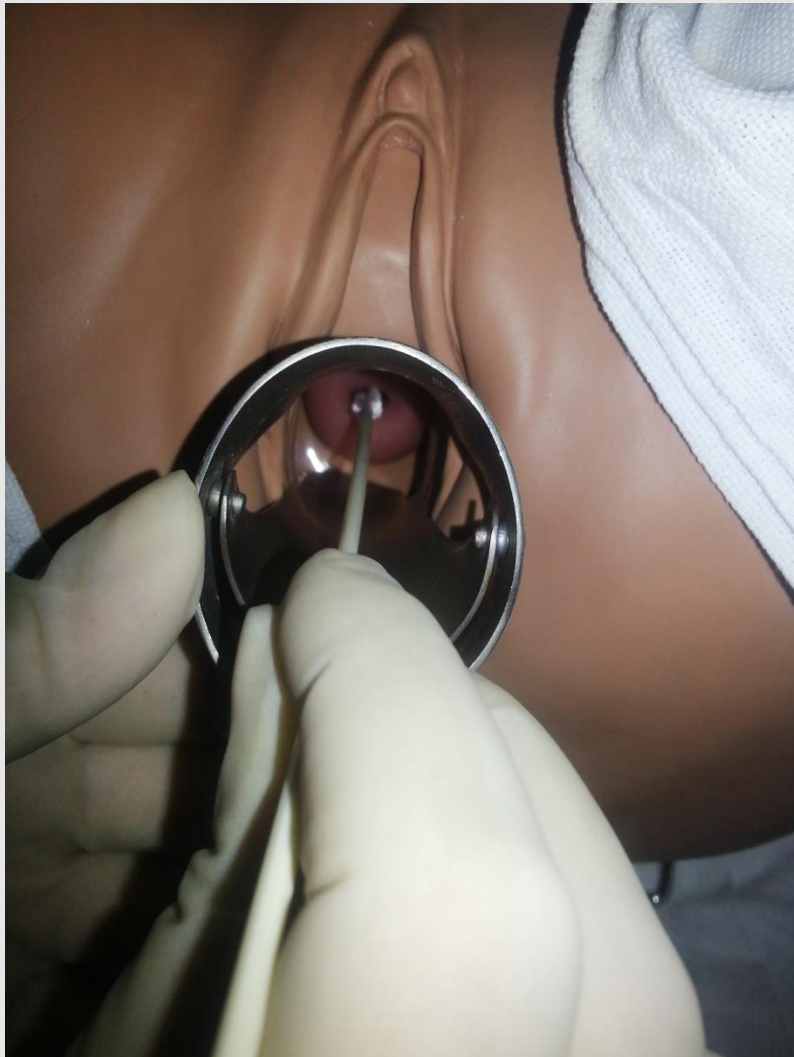


HPV DNA TESTING

HPV DNA TEST



Cervical cell collection



Place brush inside vial containing specimen transport medium



Snapping at score line on the shaft of brush



HPV DNA TEST



ADVANTAGES

- Specimen collection is simple
- Self-collection possible
- Highly sensitive test
- Screening interval may be extended up to 10 years for screen negative women
- Objective and reproducible
- Can be performed by trained technician
- Possible to obtain results in few hours

DISADVANTAGES

- Requires specialized equipment and consumables
- Expensive
- Requires functioning laboratory, storage facilities for samples & consumables
- Arrangement for specimen transport may be complex
- Results may not be immediately available

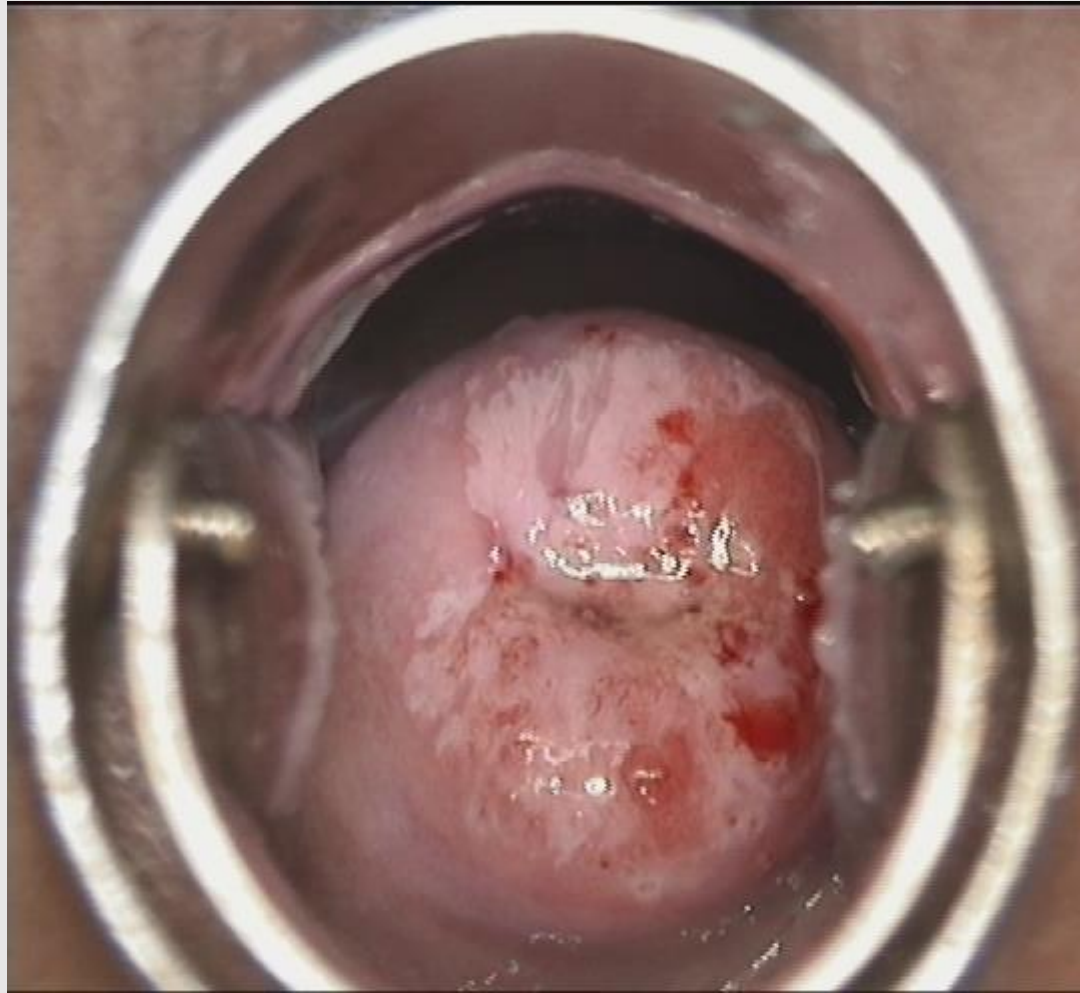


VISUAL INSPECTION WITH ACETIC ACID (VIA)

Visual inspection with acetic acid (VIA)



- Naked eye Inspection of cervix after applying 3-5% acetic acid, using a good light source
- Outpatient procedure
- Safe, rapid, reliable & inexpensive
- Anaesthesia not required



Principle of VIA

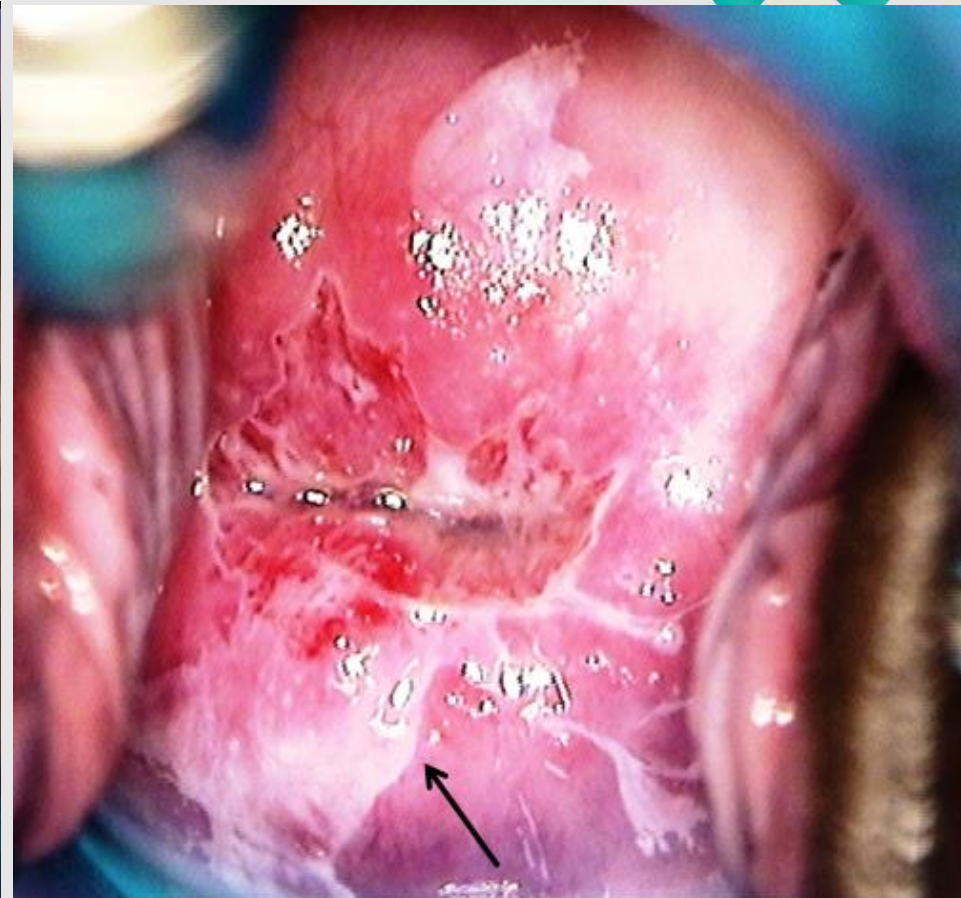


- 5% acetic acid causes coagulation of proteins on surface epithelium that appear as a white patch
- Normal cervical epithelium does not become white as it contains very little protein to be coagulated by acetic acid
- Pre-cancers of cervix contain more amount of protein which gets coagulated by acetic acid giving a white appearance
- Higher the grade of cervical pre-cancer, denser is the intensity of white patch
- Growth of cervical cancer may or may not be aceto-white

VISUAL INSPECTION WITH ACETIC ACID (VIA)



Cervix before application of dilute acetic acid



Aceto-white change one minute after application of dilute acetic acid

VISUAL INSPECTION WITH ACETIC ACID (VIA)



Advantages

Simple

Inexpensive

Immediate results

Immediate treatment

Minimal infrastructure requirements

Consumables available easily

Disadvantages

Subjective

Requires rigorous training & supervision

Sensitivity lower than HPV test

Sensitivity lower in post menopausal women

Colposcope



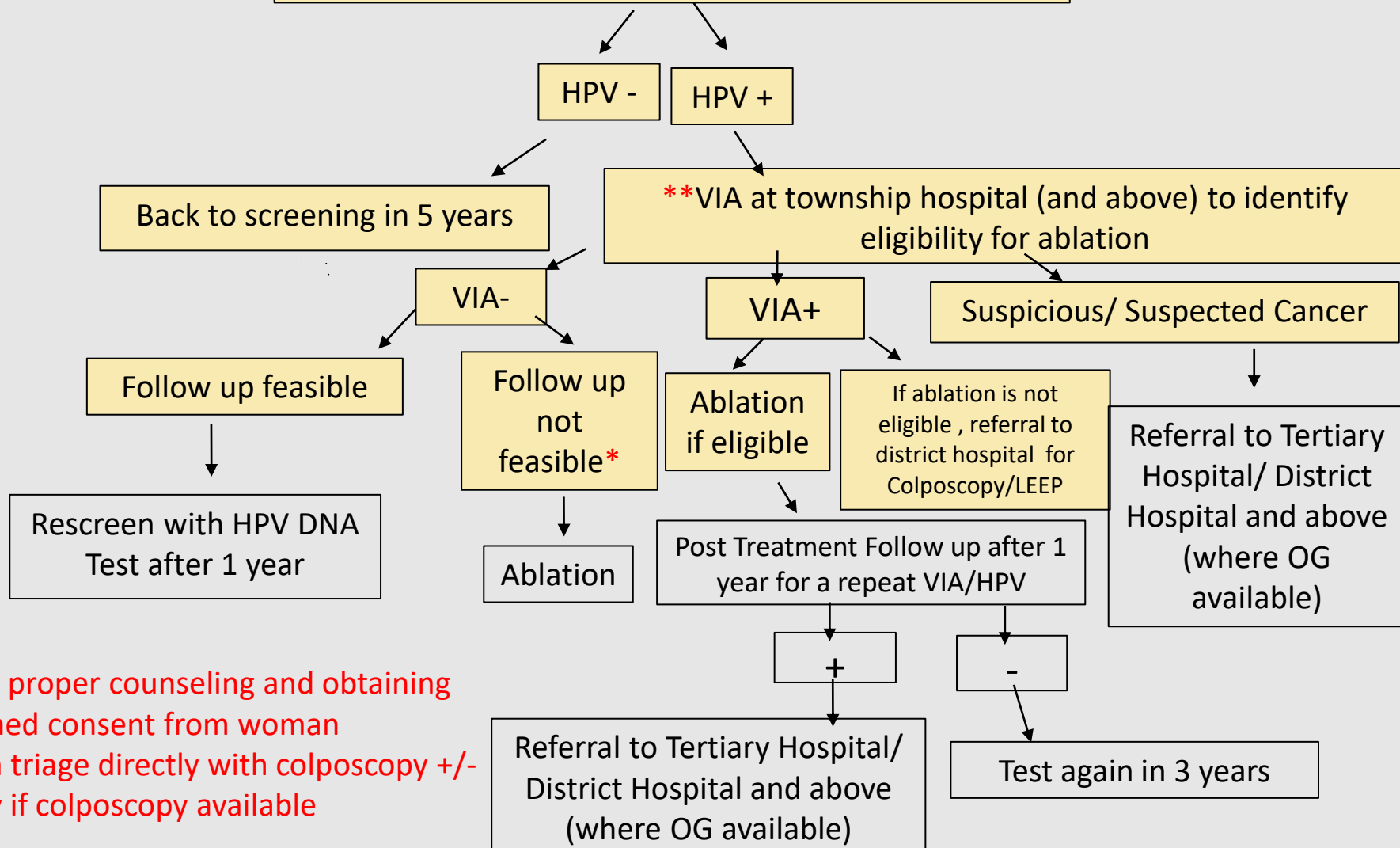
- Tool to examine lower genital tract under stereoscopic binocular vision
- Variable magnification (4x to 30x)
- Powerful variable intensity light source for illuminating the area to be examined



Community Setting in Rural Areas



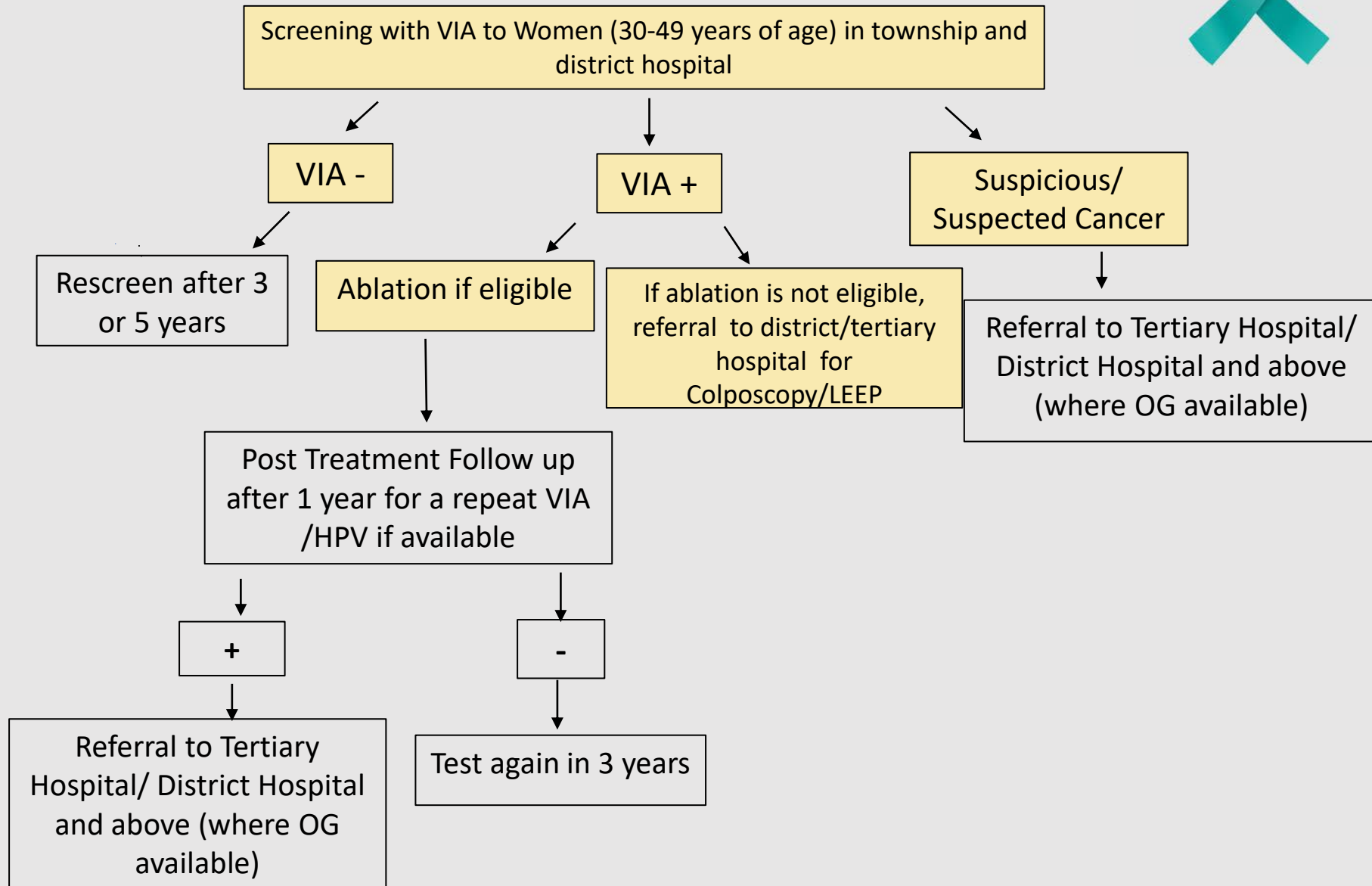
HPV DNA Testing to Women (30-49 years of age)



*After proper counseling and obtaining informed consent from woman

** can triage directly with colposcopy +/- biopsy if colposcopy available

Hospital Setting in Urban Areas

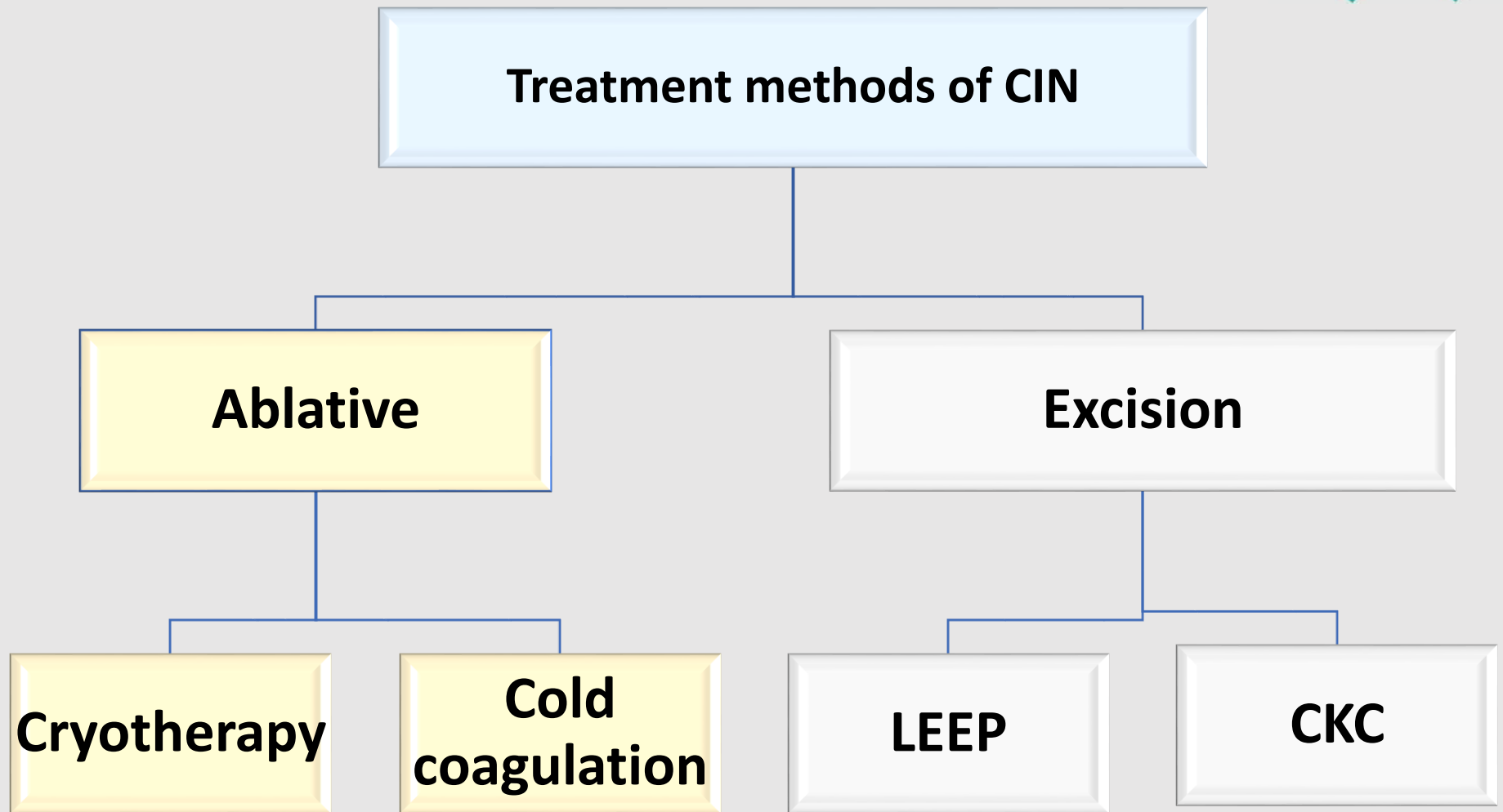


SCREENING INTERVAL



- VIA: 3 - 5 years for screen negative women
- HPV: At least 5 years for screen negative women
- HIV positive women & girls and have initiated sexual activity
 - As soon as they are detected HIV positive regardless of age
(? To start at the age of 25 years for WLHIV)
 - Interval should not exceed 3 years

Treatment options for cervical pre-cancers





Management of VIA positive women

- **Screen & treat (VIA as primary screening test)**
 - Assess for suitability of treatment by cryotherapy
 - Obtain consent
 - Treat immediately in same sitting as VIA
- **Screen, diagnose and treat**
 - Refer for Colposcopy for evaluation
 - Treat based on colposcopy diagnosis



Advantages of 'screen & treat' strategy

- Reduces number of visits to the clinic
- Ensures compliance of the screen positive women to treatment.
- Improves the efficiency of the program
- Saves resources by reducing referral of women to higher centres



Disadvantages of 'screen & treat' strategy

*Unnecessary treatment of false positive cases
(Overtreatment)*

Benefits of ensuring
treatment outweigh the
insignificant risk of treatment
side effects




Treatment alternative to cryotherapy

- Ablative method of treatment
- Is as effective as cryotherapy
- Has similar safety profile like cryotherapy
- Does not require supply of refrigerant gas
- Treatment time less



Future Plan

- Expansion of Cervical Cancer Screening in Shan State (Taunggyi District), Chin State, Kachin State in 2021



Any Comments and
Suggestions are highly
Appreciated