

Screening and treatment to reduce the risk and incidence of cervical cancer

Screening for early detection and treatment of precancerous cervical lesions is increasingly seen as important in Vietnam, where national cancer registries indicate a rise in cervical cancer. While organized or routine cytology screening programs have led to a large decline in cervical cancer incidence and mortality in developed countries, the current opportunistic cytology-based screening model has failed to have an impact on the overall incidence of cervical cancer in Vietnam. Human papillomavirus (HPV) vaccines, which are expected to reduce the risk and incidence of cervical cancer, are highly effective in preventing precancerous lesions caused by HPV types 16 and 18, which account for more than 70% of cervical cancer cases.

Even once HPV vaccines are broadly available, cervical screening will still be necessary for women who have not been vaccinated or have already started their sexual life, as well as to ensure the remaining 30% of cervical cancers caused by genotypes not included in the current vaccines are detected. The “screen and treat” model using either HPV DNA testing or VIA (visual inspection with acetic acid) followed by treatment with cryotherapy (freezing) has been proposed by the Alliance for Cervical Cancer Prevention as the most efficient and effective strategy for secondary prevention of cervical cancer in low-resource settings.

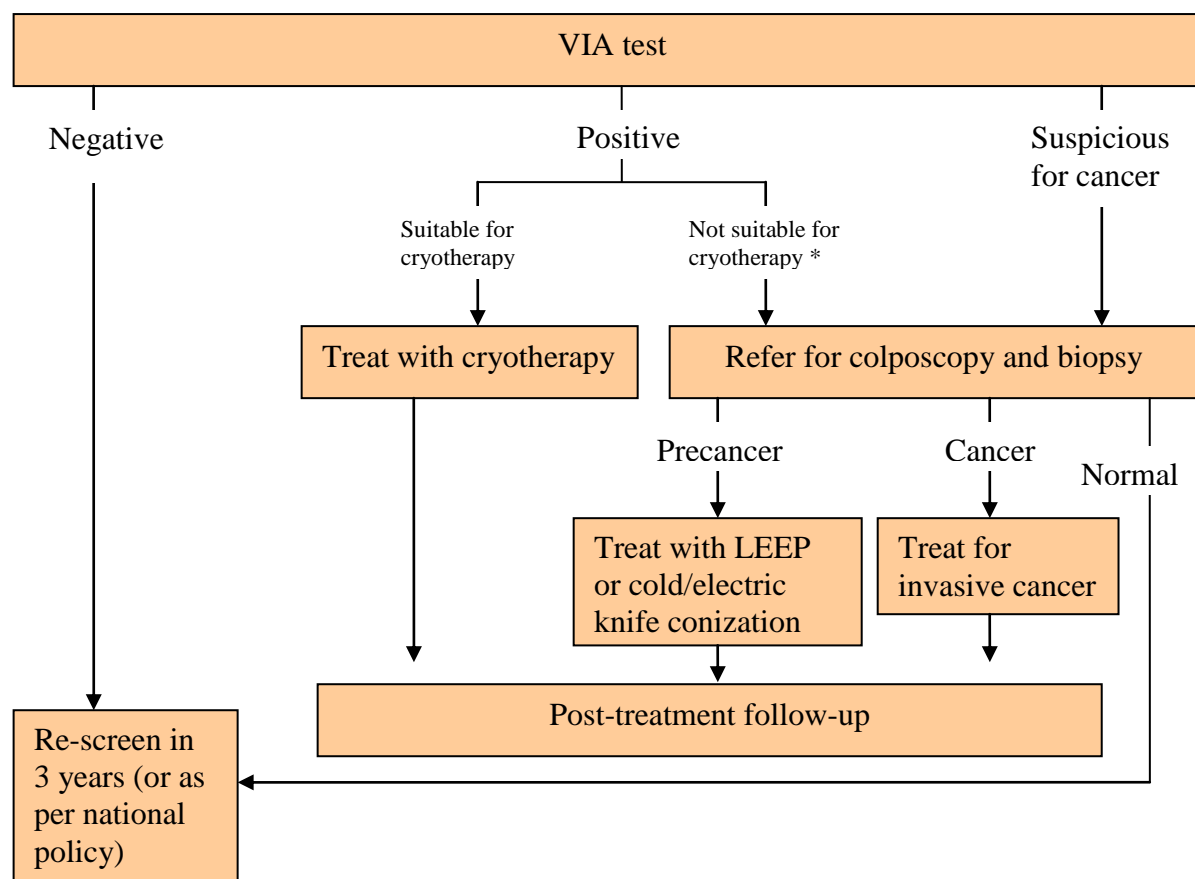
In Vietnam, national and provincial officials are collaborating with PATH to identify ways of strengthening secondary prevention of cervical cancer through screening and treatment of adult women. The project, “Strengthening secondary prevention of cervical cancer in Vietnam,” is working in three provinces throughout the country: Thanh Hoa since the beginning of 2009, and Thua Thien Hue and Can Tho since the beginning of 2010. The project also works to identify and adapt existing information, education, and communication materials and conducts activities to provide the community, especially women, with appropriate information on secondary prevention of cervical cancer.

The process of screening then treatment, currently proposed for Vietnam, is based on VIA for screening, followed by treatment through cryotherapy or referral for colposcopy and appropriate treatment as needed (Figure 1).



Vietnam's new national guidelines for screening and treatment of cervical cancer were finalized in 2011.

Figure 1. Proposed screen and treat model for Vietnam including follow up and management of patients according to screening results.



In this project, women aged 30 to 49 years are screened with VIA. Positive women are treated with cryotherapy, if appropriate. When cryotherapy treatment is inappropriate in a particular case, women are referred to the provincial or national level for loop electrosurgical excision procedure (LEEP) or another appropriate treatment. Table 1 below summarizes the screening and treatment services at each level.

Table 1. Model of screening for and treatment of precancerous cervical lesions by level in project sites

	Commune level	District level	Provincial level
Counseling and testing	VIA	VIA	VIA
Confirmation	Service not offered	Service not offered	<ul style="list-style-type: none"> Colposcopy and histopathology on referred cases that are inappropriate for management at the district hospital
Follow-up and pre-cancer treatment	<ul style="list-style-type: none"> Refer to the district level if VIA (+) Refer to the provincial and national level if suspected cancer 	<ul style="list-style-type: none"> Cryotherapy intermediately if VIA (+) Refer to the provincial and national level if suspected cancer or otherwise inappropriate for management at district hospital 	<ul style="list-style-type: none"> Cryotherapy or LEEP, depending on the location and extent of the lesion Refer to the national level if suspected cancer or otherwise inappropriate for management at provincial hospital

With technical and financial support from PATH, the Vietnamese Ministry of Health has been building staff capacity through a series of skills trainings on screening and treatment of cervical precancer and cancer, including LEEP and colposcopy for provincial-level doctors, cryotherapy and VIA for district-level doctors and assistant doctors, and VIA for commune-level nurses and midwives, as well as communication skills to mobilize communities in the project provinces (Table 2). Additionally, health workers were trained to provide training to new providers, counseling, and supportive supervision.

Table 2. Number of staff trained in secondary prevention

Training content	Staff trained
LEEP & colposcopy for doctors	6
Cryotherapy & VIA for doctors and assistant doctors	46
VIA for nurses and midwives	59
Communication skills for counselors	143
Training of trainers for doctors	15
Supportive supervision	37

As of February 2011, more than 38,000 women aged 30 to 49 years have received screening services across the three provinces (Table 3). Of these, 3.2% of women screened positive with VIA.

Table 3. Number of women aged 30 to 49 years screened and treated for cervical precancer in three provinces from 2009 to 2011*

	Thanh Hoa	Hue	Can Tho	Total	
VIA screened	19,566	6,738	11,883	38,187	
VIA positive	297	728	197	1,222	3%

**Due to potential referral from lower-level health facilities, numbers may not be mutually exclusive.*

Of the 1,222 women screened at the district/provincial level who were VIA positive, approximately half received cryotherapy treatment, and half were referred. Based on the supportive supervision reports, the majority of the women referred were for more advanced treatment. Other reasons for treatment referral include suspicion for cancer, inappropriate size/location of the lesion for cryotherapy, or unavailability of cryotherapy service.



Materials provided health care professionals with guidance on appropriate secondary prevention of cervical cancer.

Under the newly updated *National Standards for Reproductive Health* launched in September 2010, the Ministry of Health has updated the technical guidelines for cervical cancer prevention. Meetings with national OB/GYN experts, policymakers, and key stakeholders were conducted to accelerate the development of effective guidelines that cover key issues, including screening techniques, diagnosis, treatment methods, and organization of screening and treatment based at different levels of the health system. The guidelines provide practical advice to health care providers at all levels of the health care system on how to prevent, detect, and treat cervical precancer. In particular, the guidelines ensure that health care providers at the primary and secondary levels possess the best available knowledge to deal with cervical cancer. Following input from key stakeholders, the National Standard Guidelines on Screening and Treatment of Cervical Precancer for Cervical Cancer Secondary Prevention will be submitted to the Ministry of Health for approval in the coming months.

In February 2011, PATH and the Ministry of Health's Maternal and Child Health Department coordinated a program evaluation with Center for Creative Initiatives in Health and Population. Evaluation results highlighted the increased capacity of local health staff, the availability of training and health education materials, and sufficient training providing clinical skills. Some implementation obstacles were also described: lack of human resources, payment scale of cryotherapy treatment, insufficient follow-up system to track referred patients, and the need for improving counseling skills for VIA positive women. The evaluation also suggested that indirect communication channels, like mass media, could be used more effectively to generate awareness. However, the provinces participating in the project felt that these challenges could be addressed with the integration of the screen-and-treat model with other gynecological services and support for the maintenance, and potential scale-up, of the model within the three provinces.

About PATH

PATH is an international nonprofit organization that creates sustainable, culturally relevant solutions, enabling communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, PATH helps provide appropriate health technologies and vital strategies that change the way people think and act. PATH's work improves global health and well-being.

Headquartered in Seattle, Washington, PATH has offices in 31 cities in 23 countries. PATH currently works in more than 70 countries in the areas of health technologies, maternal and child health, reproductive health, vaccines and immunization, and emerging and epidemic diseases.

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Key Cervical Cancer Resources

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