

### A How-to-Guide to Cervical Cancer Screening and Treatment Programmes



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# Acronyms and abbreviations

CCSPT:	Cervical cancer screening and preventative therapy
CIN:	Cervical intraepithelial neoplasm
<b>CO</b> <sub>2</sub> :	Carbon dioxide
DNA:	Deoxyribonucleic acid
ECC:	Endocervical curettage
FIGO:	International Federation of Gynaecology and Obstetrics
GAVI:	Global Alliance for Vaccines and Immunization
HIV:	Human immunodeficiency virus
HPV:	Human papilloma virus
IEC:	Information, education and communication
IPPF:	International Planned Parenthood Federation
LBC:	Liquid based cytology
LEEP:	Loop electrosurgical excision procedure
LMIC:	Low- and middle-income countries
<b>N</b> <sub>2</sub> <b>O</b> :	Nitrous oxide
Pap smear:	Papanicolaou smear test
SRH:	Sexual and reproductive health
UICC:	Union for International Cancer Control
VIA:	Visual inspection with acetic acid
VILI:	Visual inspection with Lugol's iodine
WHO:	World Health Organization

CCCDT.

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## Foreword

Cervical cancer is the fourth most frequent cancer in women,<sup>a</sup> with an estimated 570,000 new cases in 2018 representing 6.6% of all female cancers. Approximately 90% of deaths from cervical cancer occurred in low and middle-income countries (LMIC).<sup>1</sup> Most women who die from cervical cancer, particularly in developing countries, are in the prime of their lives. A woman's death due to a preventable illness is both a personal tragedy and a sad and unnecessary loss for her family and community, with enormous repercussions for the welfare of both.<sup>2</sup>

Existing cervical cancer prevention programmes in developing countries have failed to achieve a major impact due to a combination of factors, including, but not limited to, weak health systems incapable of integrating new technologies for prevention and treatment, limited financial resources and a lack of political will, as well as women's unequal access to health care in many societies due to gender norms and pervasive patriarchal structures that affect women's capacity to fully exercise their rights. Overcoming this reality requires coordinated efforts by a diverse group of stakeholders, including authorities at different levels, health providers and institutions, the donor community, scientists and civil society organizations, including those focused on sexual and reproductive health and rights. These efforts should lead to the implementation of programmatic interventions over a woman's life-course, combining evidence-informed primary, secondary and tertiary prevention strategies that are implemented from a rights perspective and have a direct impact on reduction.

The purpose of this International Planned Parenthood Federation (IPPF) **How-to-Guide to Cervical Cancer Screening and Treatment Programmes** is to contribute to the implementation of stronger secondary prevention programmes for cervical cancer and high quality referral services to primary and tertiary care in order to reduce related incidence and mortality in the long term.

<sup>a</sup> This guide often refers to "women." Although the vast majority of cervical cancer related services are provided to individuals who identify as women, IPPF acknowledges that other people who do not identify as women (such as trans men/trans masculine and non-binary people) can also have a need for primary, secondary and tertiary cervical cancer prevention programmes.

# Introduction

#### What is this guide?

This **How-to-Guide** offers practical recommendations for the introduction and/or strengthening of **cervical cancer prevention** programmes led by sexual and reproductive health (SRH) organizations. It includes five main sections:

- A reminder: Why work on cervical cancer prevention? This section summarizes critical data on cervical cancer and makes the case for why IPPF Member Associations and other SRH organizations should integrate cervical cancer prevention programmes into their current work.
- Getting started: Basics of cervical cancer prevention This section offers a brief overview of cervical cancer, including
  information on the technologies available for cervical cancer prevention (with a focus on screening and treatment).
  This section also provides information on the advantages and limitations of different methods, as well as
  recommendations on age and period between screenings.
- Steps for cervical cancer prevention programming This section provides evidence-informed recommendations to design, implement, monitor and evaluate cervical cancer prevention programmes (with a focus on screening and preventive therapy). This section also includes a number of brief case studies that feature examples of how other organizations have incorporated these recommendations into their work.
- Good practices in cervical cancer programming This section summarizes actual good practices that help reduce barriers and increase access for underserved women, prevent loss to follow-up for women with positive screening results and generate an enabling environment for the provision of sustainable programmes.
- Want to know more? Recommended resources This section includes a list of useful materials to complement the content of this guide, including but not limited to guidelines, training tools, videos, peer review articles and websites.

#### Why was this guide developed?

An increasing number of IPPF Member Associations and SRH organizations are working to introduce and/or strengthen cervical cancer prevention programmes, with the aim of increasing their impact on the reduction of mortality and morbidity. As a result, there is an increased demand for guidance on how to design, implement and monitor these programmes that incorporates the most recent evidence, as well as documented lessons learned and best practices on integrating cervical cancer screening and treatment into existing SRH care and reaching the most hard-to-reach populations. While there are many technical documents and clinical guidelines on cervical cancer available, there are fewer programmatic tools, particularly targeted at SRH organizations. This guide seeks to fill this gap by bringing together the most recent evidence from the World Health Organization (WHO) and other authoritative sources in a user-friendly document, along with findings from operational research and evaluation of cervical cancer programmes in different regions and anecdotal evidence from IPPF Member Associations.

#### Who is this guide for?

This guide is primarily meant for program managers, clinic managers and other programmatic staff at IPPF Secretariat and Member Associations. The information provided can be used both by experienced Member Associations looking to improve their cervical cancer programming and by those who are planning to introduce new services. As each Member Association is different and has different levels of experience, it is likely that not all of the content included in this guide will be equally relevant for each Association.

Other SRH organizations interested in cervical cancer programming can use the recommendations provided as is relevant to their internal structures, capacities and the current status of their programmes.<sup>b</sup>



<sup>b</sup> To support the use by a wide range of actors, the guide will be available online in English, French and Spanish. Translation to other languages will be considered in the future.

# A reminder: Why work on cervical cancer prevention?

#### Cervical cancer prevention is about health equity.

"Health equity" implies that ideally, everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential (WHO, nd). As the following statistics show (Globocan, 2012), women in LMIC and those affected by HIV are unfairly affected by one of the most preventable and treatable forms of cancer:

- Cervical cancer is the fourth most common cancer in women, and the seventh overall, with an estimated 528,000 new cases in 2012. A vast majority (around 85%) of the global burden occurs in lessdeveloped regions, where cervical cancer accounts for almost 12% of all female cancers.
- High-risk regions (standardized rates over 30 per 100,000) include Eastern Africa (42.7), Melanesia (33.3) and Southern (31.5) and Middle (30.6) Africa. Rates are lowest in Australia/New Zealand (5.5) and Western Asia (4.4). Cervical cancer remains the most common cancer in women in Eastern and Middle Africa.
- There were an estimated 266,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths. Almost nine out of 10 (87%) cervical cancer deaths occur in less-developed regions. Mortality varies 18-fold between the different regions of the world, with rates ranging from less than two per 100,000 in Western Asia, Western Europe and Australia/New Zealand to more than 20 per 100,000 in Melanesia (20.6) and Middle (22.2) and Eastern (27.6) Africa. Deaths due to cervical cancer are projected to rise by almost 25% over the next 10 years.
- Women living in underserved areas, both rural and peri-urban, have limited access to facilities that provided screening and treatment services for human papillomavirus (HPV). Health care proximity has been identified as one of the common barriers that prevent women from seeking screening services. Additionally, women living with HIV are more vulnerable than HIV-negative women to persistent HPV infection and are four to five times more at risk of developing cancer. With declining HIV-related mortality, cervical cancer has become a leading cause of death for the 16 million women with HIV around the globe.

Sources: Globocan 2012 Cervical cancer fact sheet <u>http://globocan.iarc.fr/Pages/fact\_sheets\_cancer.aspx.</u>

Lim JNW & Ojo AA. Barriers to utilisation of cervical cancer screening in Sub Sahara Africa: A systematic review. European Journal of Cancer Care. 2017;26, e12444, doi: 10.1111/ecc.12444 | Joint United National Programme on HIV/AIDS (UNAIDS). The Gap Report. Geneva, Switzerland, UNAIDS, 2014

#### Cervical cancer prevention is about women's rights and gender equality.

- Failure to provide available preventive techniques is a clear violation of women's right to health, to life, to enjoy the benefits of medical progress and to other fundamental human rights recognized in international treaties.
- A woman's death due to a preventable illness such as cervical cancer is unacceptable! It illustrates the impact
  of gender inequalities upon women's health vulnerable women who are disadvantaged by historical and
  socioeconomic factors (e.g. women in developing countries; more impoverished women, particularly those
  living in remote areas; and women living with HIV) face significant challenges and sometimes stigma when
  accessing services and are therefore at the most significant risk of cervical cancer.
- The experiences of Member Associations working on cervical cancer also indicate that harmful gender norms and practices impact women's capacity to access life-saving services, such as timely cervical cancer prevention, and to make their own free choices regarding preventive treatment.

**IPPF is committed to integrating cervical cancer prevention in our work,** but there are significant challenges when it comes to implementation.

- Addressing cervical cancer is a core part of IPPF's mandate and is included as part of the Integrated Package
  of Essential Services (IPES)<sup>a</sup> a broad range of SRH services intended to meet the most pressing needs of the
  populations served by IPPF Member Associations, including counselling, contraception, safe abortion care, care
  for sexually transmitted infections (STIs)/reproductive tract infections, HIV, gynaecology services (including
  cervical cancer screening), prenatal care and gender-based violence services.
- Addressing cervical cancer is also interlinked to the commitments acquired by the Federation as part of its Strategic Plan 2016-2022 and its Gender Equality Strategy 2017-2022. These frameworks highlight the importance of meeting the needs of individuals, in all their diversity, throughout their entire lives, considering the different challenges they may face at different stages of their lives and how they are affected by the sociocultural context in which they live. These strategies also emphasize the need to focus IPPF's work on inclusivity to ensure that actions reach those who are socially excluded, marginalized and underserved.
- Documentation of IPPF's work to date indicates that significant challenges still exist in terms of:
  - a) ensuring access to treatment of pre-cancerous lesions (This is an issue of paramount importance, as evidence indicates that in some countries, up to 80% of women diagnosed with cervical precancer never receive the recommended treatment.<sup>a</sup>)
  - b) breaking stigma/dispelling myths associated with cancer in general, and cervical cancer more specifically
  - c) reaching women in the recommended age range (30-49 years old)
  - d) ensuring sustainable services for underserved women, particularly those that live in remote and/or marginalized areas

Sources: 1. Gage JC, Ferreccio C, Gonzales M, et al. Follow-up care of women with an abnormal cytology in a low-resource setting.

# Getting started: Basics of cervical cancer

#### **Cervical cancer key facts<sup>3</sup>**

- Human papillomavirus (HPV) is the primary cause of cervical cancer. There is also evidence linking HPV with cancers of the anus, vulva, vagina, penis and throat.
- HPV is a group of viruses that are extremely common worldwide. There are more than 100 types of HPV, of which at least 14 are cancer causing (also known as high-risk type). Two HPV types (16 and 18) cause 70% of cervical cancers and 50% of precancerous cervical lesions.
- HPV is mainly transmitted through sexual contact, and most people are infected with HPV shortly after the onset of sexual activity.
- HPV infection usually does not cause serious harm or have any noticeable symptoms, and it generally goes away on its own without medical treatment. In some cases, HPV doesn't go away, and the virus can lead to precancerous lesions or even cervical cancer.
- It takes 15 to 20 years for cervical cancer to develop in women with healthy immune systems, which means there are
  opportunities over a long period of time to identify the presence of the virus and any precancerous lesions. It can take
  only five to 10 years to present in women with weakened immune systems, such as those with untreated HIV
  infections.
- Risk factors for HPV persistence and development of cervical cancer include early first sexual intercourse, multiple sexual partners, tobacco use and immune suppression (for example, women living with HIV are at higher risk of HPV infection and are more frequently infected by multiple HPV types).



#### The continuum of cervical cancer prevention

Cervical cancer prevention requires a comprehensive set of interventions during a woman's life course, as illustrated in Figure 1. This guide focuses on secondary prevention and referral to primary and tertiary prevention, as IPPF Member Associations play a critical role in the provision of screening and treatment, as the target populations are often reached by integrating cervical cancer screening and treatment with other SRH services.

Figure 1: Overview of programmatic interventions over the life course to prevent HPV infection and cervical cancer



Source: WHO, 2013. Comprehensive cervical cancer prevention and control a healthier future for girls and women.

PRIMARY PREVENTION SEC	ONDARY PREVENTION	TERTIARY PREVENTION
<ul> <li>Girls 9-14 years old</li> <li>HPV vaccination <ul> <li>Note: emerging evidence is available on the use of vaccines among boys, sexually active women with multiple partners, and men who have sex with men. (See "references" (11))</li> </ul> </li> <li>Girls and boys, as appropriate <ul> <li>Health information and warnings about tobacco use*</li> <li>Sexuality education tailored to age &amp; culture</li> <li>Condom promotion/provision for those engaged</li> </ul> </li> </ul>	men > 30 years of age ening and treatment eeded Screen and treat" with ow-cost VIA technology, followed by cryotherapy IPV testing for high-risk IPV types (e.g. types 16, 8 and others)	All women, as needed Treatment of invasive cancer at any age • Ablative surgery • Radiotherapy • Chemotherapy

#### **Cervical cancer prevention technologies**

A broad range of technologies has been developed to support cervical cancer prevention on the continuum from primary to tertiary prevention. These technologies focus on HPV and on the treatment of cervical intraepithelial neoplasia (CIN), a premalignant lesion that may exist at any one of three stages: CIN1, CIN2 or CIN3. If left untreated, CIN2 or CIN3

\* Tobacco use is an additional risk factor for cervical cancer.

(collectively referred to as CIN2+) can progress to cervical cancer.<sup>4</sup> This guide focuses on secondary prevention, and a brief explanation of each relevant method used within secondary prevention is offered below. A brief explanation on vaccinations is also included, as IPPF Member Associations have the potential to support public sector immunization initiatives and strengthen the comprehensiveness of their cervical cancer work, especially through education and awareness raising.

#### **1. PRIMARY PREVENTION - HPV VACCINATION**

#### **KEY FACTS**

- HPV vaccinations are proven to be highly effective and safe.<sup>5</sup> The Global Advisory Committee on Vaccine Safety recommends HPV vaccines as an extremely safe product.<sup>6</sup>
- Cost-effectiveness studies have recommended HPV immunization as an addition to, not a substitute for, cervical screening.<sup>7</sup>
- Three<sup>c</sup> HPV vaccines (Cervarix [bivalent<sup>d</sup>], Gardasil [quadrivalent<sup>e</sup>], Gardasil 9 [nine-valent<sup>f</sup>]) are now marketed in many countries throughout the world. All three vaccines are highly efficacious in preventing infection with virus types 16 and 18, which are together responsible for approximately 70% of global cervical cancer cases. The vaccines are also highly efficacious in preventing precancerous cervical lesions caused by these virus types.
- The HPV vaccine works best if individuals get it before they come into contact with HPV, in other words, before they engage in vaginal, anal or oral sex.
- The HPV vaccine does not protect against other infections spread during sex, such as chlamydia, and it will not stop girls from unintended pregnancy, so practicing safe sex is still vital.
- The benefits of effectively implemented HPV vaccination programmes are already very apparent. Several countries that have introduced HPV vaccines to their immunization programme have reported a 50% decrease in the incidence rate of uterine cervix precancerous lesions among younger women. In contrast, the mortality rate from cervical cancer in Japan, where HPV vaccination is not proactively recommended, increased by 3.4% from 1995 to 2005 and is expected to increase by 5.9% from 2005 to 2015.<sup>8</sup>

#### TARGET POPULATION

- The primary target group in most of the countries that recommend HPV vaccination is young adolescent girls aged 9-14 years old.
- A two-dose schedule (zero and six months) is recommended for all three vaccines for females under 15 years of age at the time of the first dose.<sup>9</sup>
- A three-dose schedule (zero, two and six months} is recommended for females over the age of 15 and for those known to have weakened immune systems, including women living with HIV.<sup>10</sup>
- Modelling studies have also shown that the inclusion of young boys, men who have sex with men and sexually active women with multiple partners (including sex workers) in immunization programmes could probably increase the speed and magnitude of reduction in HPV transmission.<sup>119</sup>



'To learn more, access https://extranet.who.int/gavi/PQ\_Web/

<sup>d</sup>It protects from virus types 16 and 18.

<sup>&</sup>lt;sup>e</sup>It protects from virus types 16, 18 and from anogenital warts, a common genital disease which is virtually always caused by infection with HPV types 6 and 11. <sup>f</sup> It protects from virus types 16, 18, 6, 11, 31, 33, 45, 52 and 58.

<sup>&</sup>lt;sup>9</sup>Cervical cancer does not affect boys and men directly because they do not have a cervix. But other cancers that can affect men – such as cancer of the anus, penis, head and neck – are also linked to infection with HPV types 16 and 18.

#### MAIN ADVANTAGES

- GAVI Alliance<sup>h</sup> estimates that the HPV vaccine is one of the highest impact vaccines in its portfolio, averting 20 deaths per 1,000 vaccinated.
- Observation studies indicate that immunization programmes may be capable of achieving more equitable protection across social class than cervical cancer screening, as they can rapidly reach a high number of inschool girls.<sup>12</sup>

#### LIMITATIONS OR DISADVANTAGES

- HPV vaccination programmes can be costly.
- Programmes implemented with out-of-school children and adolescents may present follow-up challenges for the second dosage.
- Vaccinated women may consider themselves fully protected and might not seek screening in the future.<sup>13</sup>

#### **OTHER**

- Political will to increase HPV vaccination coverage is affected by unsubstantiated allegations regarding vaccine safety by anti-vaccination groups.<sup>14</sup> It is important to develop messages to dispel existing myths and rumours, including that the HPV vaccination is not an abortifacient, nor does it have antifertility properties, and the vaccine will not result in individuals having more unprotected sex. HPV vaccination is not associated with severe adverse events.<sup>i</sup>
- It is recommended that HPV vaccination programmes be incorporated as part of a national initiative implemented by multi-stakeholder partnerships in order to ensure high coverage, ability to reach underserved communities and sustainability, and to ensure vaccines are part of the overall strategy to eliminate cervical cancer.



<sup>&</sup>lt;sup>h</sup> GAVI is an international organization that was created in 2000 to improve access to new and underused vaccines for children living in the world's poorest countries. To learn more visit <u>www.gavi.org</u>

To learn more, visit the Global Advisory Committee on Vaccinations Safety statements, available at: https://www.who.int/vaccine\_safety/committee/topics/hpv/en/

#### 2. SECONDARY PREVENTION

Secondary prevention involves screening, which aims to detect and treat precancerous changes, which, if left untreated, may lead to cancer. Screening by itself has no actual preventive value, and establishing links to treatment of precancerous lesions is essential. If such a link cannot be implemented, then the screening programme is likely to have no impact on the incidence of cervical cancer.

#### 2.1 OVERVIEW OF SCREENING AND DIAGNOSTIC METHODS<sup>15</sup>

#### **HPV DNA TESTING**

#### **SCREENING PROCEDURE**

A sample is taken by the provider or by the woman herself, stored in a container with an appropriate preservative solution and sent to the laboratory (or processed immediately on-site if a single visit approach<sup>i</sup>/point-of-care strategy<sup>k</sup> is used). **STRENGTHS** 

- Collection of the specimen is simple, facilitating the possibility of self-collected specimens.
- Self-collected vaginal samples present the possibility of increasing coverage and early detection in resource-constrained areas.
- Self-collected vaginal samples allow women who do not want to be examined by health providers to access screening services.
- The test suits women who have a small orifice or cannot tolerate a speculum.
- If a point-of-care test with on-site processing and rapid results is used, a positive result can be followed by an offer of immediate ablative treatment for all HPV-positive women or after a consecutive positive triage test (e.g. visual inspection), i.e. a single visit approach.

#### LIMITATIONS

- This approach requires supplies and equipment, which may not be readily accessible.
- In some settings, storing materials can be challenging (e.g. storing collection tubes at room temperature [15-30 °C]).
- In general, the laboratory and specimen transport requirements are complex.
- Using a non-point-of-care HPV test means the result will not be immediately available, requiring the patient to make multiple visits and increasing the risk of loss to follow-up.

#### **ADDITIONAL INFORMATION**

- Commercially-available tests that are being used in some countries for cervical cancer screening include: Hybrid Capture 2 (QIAGEN), careHPV (QIAGEN), cobas HPV Test (Roche), Cervista HPV HR Assay (Hologic), Aptima HPV Assay (Hologic), BD Onclarity HPV Assay (BD) and GeneXpert/Xpert HPV (Cepheid).
- The unit cost is often high (careHPV offers a more affordable cost for LMIC).

<sup>&</sup>lt;sup>i</sup>Screening services are followed by treatment for women who screen positive for pre-cancer. Ideally, the treatment occurs on the same day and at the same location.

<sup>&</sup>lt;sup>k</sup>Point of care is defined as a screening test taken at the time of the consultation in a care facility with instant availability of results to make immediate and informed decisions about a client's care.

#### VISUAL SCREENING METHODS – VISUAL INSPECTION WITH ACETIC ACID (VIA) AND VISUAL INSPECTION WITH LUGOL'S IODINE (VILI)

#### SCREENING PROCEDURE

A trained provider conducts a cervical speculum examination to visualize the cervix and then applies diluted acetic acid or Lugol's iodine to visualize tissue changes on the cervix.

#### STRENGTHS

- VIA/VILI are relatively inexpensive and straightforward methods, with low infrastructure and equipment requirements (adequate light source, sterile speculum, examination gloves, cotton swabs, acetic acid/Lugol's iodine, infection prevention measures and sterilization products).
- The results are available immediately, which decreases loss to follow-up.
- A wide range of personnel can perform VIA/VILI after training.
- Infrastructure requirements are minimal.
- A positive result can be followed by an offer of immediate treatment (i.e. single visit approach).

#### **KEY CONSIDERATIONS**

- Brief training programs on VIA/VILI mean providers do not always have the opportunity to observe a sufficient number of cases to learn how to differentiate negative results (most common) from positive (not common). As visual inspection can be subjective, a strong adherence to standards and supportive supervision are essential.
- VIA/VILI is not appropriate for many postmenopausal women or younger women who are living with HIV, as the changes may not be evident at the tissue level.

#### **ADDITIONAL INFORMATION**

- For VIA, it is vital to ensure the strength of the acetic acid and of the light source in order to guarantee the quality of the screening.
- The test provider is responsible for identifying a set of findings associated with pre-cancer, and therefore must have a good knowledge of the anatomy, physiology and pathology of the cervix. They should know the clinical features of benign conditions, inflammation, precancerous lesions and invasive cancer of the cervix.

#### PAP SMEAR (CONVENTIONAL CYTOLOGY)

#### **SCREENING PROCEDURE**

The provider uses a spatula and/or small brush to take a sample of cervical cells, which is then fixed onto slides and examined by a trained cytotechnician in a laboratory.

#### **STRENGTHS**

- This method has proven useful to decrease cervical cancer in the context of a well-functioning system.
- Health facilities in high-resource countries may be more familiar with this method, as it has been available for many years.
- Training and mechanisms for quality control and quality assurance are well established.

#### **KEY CONSIDERATIONS**

- The method is difficult to introduce and maintain in low-resource settings, due, among other things, to lack of the necessary infrastructure and workforce (i.e. pathologists).
- Systems are needed to ensure timely return and communication of test results and follow-up care for women that screen positive.
- Transportation is required to transport specimens to the laboratory and results back to the clinic.
- Cytology programmes require clinical and laboratory quality control and quality assurance.
- Interpretation is subjective.
- Results are not immediately available and multiple visits are required, increasing the risk of loss to follow-up.
- Cytology has lower sensitivity but better specificity.

#### **ADDITIONAL INFORMATION**

• With this method, the primary role of health providers is to collect specimens, not to provide diagnosis.

#### LIQUID-BASED CYTOLOGY (LBC)

#### **SCREENING PROCEDURE**

The provider takes a sample of cervical cells with a spatula and/or small brush, which is then immersed in a preservative solution and sent to a laboratory for processing and review by a trained cytotechnician and a pathologist (when results are abnormal).

#### **STRENGTHS**

- Once cytotechnicians are proficient, LBC samples take less time to review.
- Samples can also be used for molecular testing (such as for HPV DNA).

#### **KEY CONSIDERATIONS**

- Supplies and laboratory facilities for LBC are more expensive than for conventional cytology. As a result, the method may not be an option in the majority of LMIC.
- Other limitations are the same as for conventional cytology.

#### **ADDITIONAL INFORMATION**

See the information provided under 'Pap Smear'.

#### COLPOSCOPY

#### **DIAGNOSTIC PROCEDURE**

The cervix, vagina and vulva are examined with a colposcope (or similar device), which provides excellent light and magnifies a field. Colposcopy is used for diagnostic procedures after a positive primary screening test or for women with inadequate VIA examination, e.g. for women where the squamocolumnar junction is not completely visible.

#### **STRENGTHS**

- The cellular patterns and surrounding blood vessels can be examined.
- This procedure can be used to guide biopsies of abnormal areas.

#### **KEY CONSIDERATIONS**

- Colposcopy is resource intensive, requiring specialized equipment and pathology services.
- It should not be used as a screening method.
- Bottlenecks can be created in the system if the procedure is not readily available, leading to patients being lost to follow-up.

#### **ADDITIONAL INFORMATION**

- Diagnostic tests have significant resource implications. They can create significant barriers for women to access services, potentially delaying treatment and/or increasing the numbers of women who are lost to follow-up and who therefore may never receive treatment for their pre-cancer.
- Diagnostic tests should not be required before treatment for pre-cancer in contexts where the resources are not available or in settings where there are high rates of loss to follow-up.

#### **BIOPSY**

#### **DIAGNOSTIC PROCEDURE**

In case of a colposcopic impression of abnormality, a small sample of abnormal tissue is removed for microscopic examination to reach a diagnosis.

#### **STRENGTHS**

A biopsy allows histological confirmation of a lesion, including cervical cancer.

#### **KEY CONSIDERATIONS**

A biopsy is resource intensive, requiring specialized equipment and pathology services.

#### **ADDITIONAL INFORMATION**

See the information provided under 'Colposcopy' above.

#### **ENDOCERVICAL CURETTAGE (ECC)**

#### PROCEDURE

Surface cells from the endocervical canal are gently scraped with a special thin instrument or spatula, and then sent to a laboratory for evaluation.

#### **STRENGTHS**

• ECC provides a sample of cells from an area of the cervix that is not visible to the naked eye or with colposcopy.

#### **KEY CONSIDERATIONS**

- ECC is resource intensive, requiring provider training, specialized equipment and pathology services.
- This procedure may cause cramping.
- Results can be confusing to interpret if the tissue is fragmented.
- **ADDITIONAL INFORMATION**

See the information provided under 'Colposcopy' above.

#### 2.2 SCREENING METHODS COMPARISON

The table presented below includes a comparison of sensitivity, specificity and positive predictive value for HPV DNA testing, visual screening and Pap smear methods, based on data obtained after implementation in low and middle-income resource settings.<sup>16</sup>

METHOD	SENSITIVITY *Proportion of people who have a condition who are identified correctly by a positive test	SPECIFICITY *Proportion of people who do not have a condition who are correctly identified by a negative test	POSITIVE PREDICTIVE VALUE <sup>17</sup> *Likelihood of having a disease when a test is positive
HPV DNA testing	66-90%	61-96%	High positive predictive value
Visual screening methods	67-80%	61-86%	Lowest positive predictive value
Pap smear	44-80%	Above 95%	High positive predictive value

#### 2.3 WHO RECOMMENDATIONS ON AGE AND FREQUENCY OF SCREENING<sup>18</sup>

- Cervical cancer screening should be performed at least once for woman between 30–49 years old, as recommended by the WHO. Therefore, it is not recommended to integrate cervical cancer screening as part of the package of services of youth-friendly facilities. Youth-friendly services and comprehensive sexuality education programmes should still educate young women about HPV, safe sexual practices and self-care throughout their life course, even if screening services are not provided.
- The age range may be extended to younger women (age 25+) if there is evidence of high risk of CIN, e.g. women and girls living with HIV.
- Women who test negative with VIA or cytology should be re-screened after three to five years.
- Women who test negative with HPV testing should be re-screened after a minimum interval of five years.
- All women who have been treated for pre-cancer should be re-screened after one year.
- Women with HIV should be screened for cervical cancer at time of diagnosis if sexually active and screened twice as often as the general population. Screening should be repeated at least every three years.
- Post-partum women can be offered cervical cancer screening using HPV testing or a Pap smear at six weeks postpartum or using VIA at six months postpartum.
- The period between screenings for women between the ages of 25 and 65 years in high-resource settings should be a maximum of five years. Women can stop screening in high-resource settings at 65 years old if they have had consistently negative results during the previous 15 years or more. In low-resource settings, screening can stop at 49 years old.
- Women who have had a hysterectomy can stop screening if the procedure was done for a non-cancerous reason.

METHOD/ DEVICE POWER SOURCE	PROCEDURE	STRENGTHS	LIMITATIONS	ADDITIONAL INFORMATION
<b>Cryotherapy/</b> N <sub>2</sub> O or CO <sub>2</sub> gas	A highly cooled metal disc is applied to the cervix to freeze and destroy precancerous lesions, with subsequent regeneration to normal epithelium.	<ul> <li>The equipment is simple and relatively inexpensive.</li> <li>Trained and competent physicians and non-physicians can perform this method, and training only takes a few days.</li> <li>Cryotherapy is an outpatient procedure and can be performed in a primary care setting.</li> <li>The procedure is fast, with the double-freeze method taking about 15 minutes.</li> <li>Anaesthesia is not required.</li> <li>A screen-positive result can be followed by an offer of treatment during the same visit, maximizing treatment coverage and reducing loss to follow-up.</li> <li>Pain and discomfort for women is minor.</li> </ul>	<ul> <li>No tissue sample is available for histopathological examination.</li> <li>This method causes profuse watery discharge for up to one month.</li> <li>Transporting gas is often tricky (gas tanks can be heavy), and unwieldy gas tanks are not conducive to mobile health campaigns.</li> <li>This method can be expensive.</li> </ul>	<ul> <li>This method uses a probe that is attached to and cooled by a tank of gas.</li> <li>The effectiveness range for this method is 77%- 93%.</li> </ul>

#### 2.4 OVERVIEW OF AVAILABLE TREATMENT METHODS<sup>19</sup>

METHOD/ DEVICE POWER SOURCE	PROCEDURE	STRENGTHS	LIMITATIONS	ADDITIONAL INFORMATION
Loop electrosurgical excision procedure (LEEP) / Electricity	Abnormal areas are excised from the cervix using a loop made of thin wire powered by an electrosurgical unit.	<ul> <li>A tissue specimen will be obtained from the procedure for histopathological examination, which allows invasive cancer to be ruled out.</li> <li>It can be performed on an outpatient basis at a secondary care level.</li> <li>It is fast (10–15 minutes) and technically simple for a trained clinician to perform.</li> <li>A screen-positive result can be followed by an offer of treatment during the same visit, maximizing treatment coverage and reducing loss to follow-up.</li> <li>Pain and discomfort for women is minor.</li> </ul>	<ul> <li>LEEP requires intensive training.</li> <li>It requires a facility where treatment is available in case of rare but severe adverse events, such as haemorrhage.</li> <li>The histology specimen can have charred borders, making lesion margins challenging to interpret.</li> <li>The equipment needed is quite sophisticated and needs maintenance.</li> <li>It requires local anaesthesia.</li> </ul>	<ul> <li>LEEP equipment includes an electrosurgical unit that generates power, a smoke evacuator with tubing, disposable loop electrodes and a speculum coated with an anti- conductive material.</li> <li>This method has a cure rate of 91% to 98% for CIN3.</li> </ul>
CryoPen/ Battery powered	The machine uses a Stirling cooler and helium as the refrigerant. The single pen core (cryoprobe) is inserted into a sheath with a 20- mm tip. The probe remains cold long enough to complete either a single, five- minute freeze or to follow the double- freeze method.	<ul> <li>This method is adapted for LMIC.</li> <li>It is fast (15 minutes for a double freeze).</li> <li>Pain and discomfort for women is minor.</li> <li>The device is portable (device is 20 pounds).</li> <li>Mid-level providers are currently using the device in Haiti and have had positive experiences.</li> </ul>	<ul> <li>Ethanol is needed for maintenance.</li> <li>The durability of the device is unknown.</li> </ul>	<ul> <li>The adapted CryoPen for LMIC consists of a cooling device built into a toolbox, with an adjoining probe. The system is portable, is equipped with a handle, weighs 20 pounds and can be used to treat approximately 24 women per eight-hour day.</li> <li>Clinical trials are in progress to prove the effectiveness of this method.</li> </ul>

METHOD/ DEVICE POWER SOURCE	PROCEDURE	STRENGTHS	LIMITATIONS	ADDITIONAL INFORMATION
Thermal ablation/ Electricity or an automotive battery	Thermal ablation uses heat to destroy cervical tissue. This method can be used for single application, as well as multiple applications for larger lesions, with treatment durations ranging from 20 to 40 seconds, depending on WHO guidelines.	<ul> <li>Thermal ablation is easy to administer, requiring only the small device and electricity.</li> <li>The updated model includes a single tip with a larger diameter, avoiding the need to change tips to accommodate different lesion sizes.</li> <li>The probe tip can be high-level disinfected rather than sterilized.</li> <li>Evidence from trials in South Africa indicates that thermal ablation can be used as part of the single visit approach, as the majority of screen-positive women meet the criteria for the use of the method.</li> <li>The simplicity of this intervention may encourage the shift of this type of treatment from hospital-based environ-ments to community settings, as in the case of cryotherapy ablation.</li> </ul>	<ul> <li>This method relies on electricity as a power source.</li> <li>The optimal temperature and application timing have not yet been determined.</li> <li>There is short but minimal pain during thermal ablation procedures.</li> </ul>	<ul> <li>This method consists of a simple box with a temperature dial and probes attached by cables.</li> <li>The effectiveness range for this method is 85%- 95%.</li> <li>Hand-held, battery- operated devices are available.</li> </ul>



# Steps for cervical cancer prevention programming

All organizations interested in cervical cancer programming must navigate the four critical phases of programme management – design, implementation, monitoring and evaluation and scale up/down (See Figure 2 for a snapshot of the main steps to be implemented as part of each phase). Keep in mind that some of the steps might not be relevant if a Member Association has previous experience in screening and treatment.

Figure 2.

<ul> <li>Assess the external context</li> <li>Assess the internal context</li> <li>Choose the most feasible approach</li></ul>	nels	<ul> <li>Train and mentor health service providers</li> <li>Develop and disseminate internal protocols</li></ul>
and screening/ treatment methods <li>Choose suitable service delivery chann</li> <li>Map out the resources needed</li> <li>Consider the benefits and challenges</li>	STEP 1.	and guidelines <li>Create demand for integrated services         <ul> <li>Advocate, as needed</li> <li>Refer women to external and internal sevices</li> <li>Assess quality</li></ul></li>
of integration <li>(See page 20)</li>	Design	(See page 35)
<ul> <li>Assess the need and feasibility</li></ul>	STEP 4.	<ul> <li>STEP 3.</li> <li>Monitoring and Eva-</li></ul>
of scaling up/down	Scale up	luation <li>Share lessons learned with the wider movement</li>
(See page 49)	/down	(See page 43)

#### **STEP 1. DESIGNING CERVICAL CANCER PREVENTION PROGRAMMES**

Cervical cancer prevention programmes should be guided by a clear vision (e.g Increased coverage by x% in x catchment areas), the identification of critical outcomes that will contribute to achieving this vision (e.g. increased awareness of and demand for cervical cancer screening, increased number of health providers ready to offer quality services, etc.) and the most recent evidence in the field. The following steps will guide Member Associations in the design stage:

#### **1. ASSESS THE EXTERNAL CONTEXT**

Regardless of the level of expertise an IPPF Member Association has in terms of cervical cancer screening, it is essential to assess the external context to better understand changing trends, the required impact, opportunities or challenges in the political environment, new actor and other factors. The following table includes some recommended questions to help assess the external context:

#### NEW TO CERVICAL CANCER PREVENTION PROGRAMMING

#### **POLICIES AND GUIDELINES:**

- Have the public health authorities issued guidelines on cervical cancer secondary prevention? If not, is there interest from the government regarding the issue?
- Are existing guidelines based on the latest WHO guidelines/other authoritative sources? If not, how might that affect the introduction of a new programme?
- Do existing policies and guidelines create opportunities or challenges for the implementation of cervical cancer prevention (e.g. national guidelines impose the use of a specific screening method, the government only allows the use of cervical cancer trainers certified by a public authority, requirements concerning data collection and reporting, existing national level strategies on cervical cancer prevention, etc.)?
- Are the screening and treatment methods selected within the scope of practice of local clinicians, as approved by relevant national entities (e.g. in some contexts nursing councils must include VIA in the providers' scope of practice in order to use this method)?

#### DATA:

- Does a Health Information System exist that can be used to monitor the screening program indicators?
- What is the incidence of cervical cancer and related mortality for the Member Association's coverage areas?
- What is the estimated number of women in the primary target age range (30-49 years old) in the coverage areas?
- What is the prevalence of HIV among women in the coverage areas?
- What are the most pressing SRH needs of women in the Member Association's coverage areas?
- Do the intervention areas selected for the initiative allow the Member Association to reach the most vulnerable and marginalized women?
- Are there characteristics of the context that may present potential challenges for women to access cervical cancer screening and treatment safely

#### **EXPERIENCED MEMBER ASSOCIATION**

#### **POLICIES AND GUIDELINES:**

• Are there new policies/guidelines in place that require the Member Association to adapt its current cervical cancer prevention programme?

#### DATA:

- Since the introduction of the current programme, have there been recorded changes in the incidence of cervical cancer in the country/area of intervention? What does this data indicate concerning the success of existing initiatives?
- Do the current geographical areas of intervention allow the Member Association to reach the most vulnerable and marginalized women?
- Are there any changes in the context that may affect future access to cervical cancer screening and treatment (e.g. humanitarian crises')?

#### **STAKEHOLDERS**:

- Since the introduction of the cervical cancer programme, are there any new actors involved in the provision of screening and treatment services? If so, what do they offer?
- What is the potential for collaboration with new actors in the intervention areas?

#### **VACCINATION:**

- Since the introduction of the cervical cancer programme, has the government introduced any new HPV vaccination programmes?
- How can HPV vaccination initiatives serve as a vehicle to reach women in the target age for screening and treatment services (e.g. mothers of vaccinated girls between 30 and 49 years old)?

#### KNOWLEDGE, ATTITUDES AND PRACTICES OF POTENTIAL CLIENTS:

- Have myths and community attitudes towards cervical cancer prevention changed since the introduction of the programme? What is this change attributed to?
- What prevailing myths/negative attitudes require additional investments from the Member Association?

<sup>&</sup>lt;sup>1</sup>IPPF Humanitarian Strategy recommends suspending gynaecological services, including pelvic exam, breast exam and cervical cancer screening, in acute emergencies.

• (e.g. high levels of gender-based violence, humanitarian context, others)?

#### **STAKEHOLDERS:**

- What are other stakeholders doing?
- Are other stakeholders targeting potential service users with screening and treatment services?
- Are other stakeholders offering both screening and treatment or just screening?
- What is the potential for collaboration with other actors in the intervention areas?

#### **VACCINATION:**

- Are there HPV vaccination programmes in place in the Member Association's coverage areas?
- How can HPV vaccination initiatives serve as a vehicle to reach women in the target age for screening and treatment services (e.g. mothers of vaccinated girls between 30 and 49 years old)?

#### KNOWLEDGE, ATTITUDES AND PRACTICES OF POTENTIAL CLIENTS AND THEIR COMMUNITIES:

- What do women know, think of and do with regards to cervical cancer prevention?
- What are the common myths and community attitudes about cervical cancer?
- What is the current role of community members in supporting/preventing access to secondary prevention? What role they could play? Note: community consultations are a good mechanism to answer these questions.

#### Brief case study 1.

When Family Health Options Kenya started to implement the Cervical Cancer Screening and Preventive Therapy (CCSPT) project in partnership with Marie Stopes International and Population Services International, this alliance implemented a mapping of stakeholders and focused on screening and treatment sites during the inception phase (further updated during the life of the project). The map below was used by partners to plan their intervention and referral networks.



#### 2. ASSESS THE INTERNAL CONTEXT

Leadership, internal buy-in, resource allocation and willingness to work in partnership with others (e.g. for advocacy and referrals) are essential whether an IPPF Member Association is aiming to strengthen its cervical cancer programming or introduce a new initiative. The following table includes some recommended questions to help conduct a general assessment of the internal context:

NEW TO CERVICAL CANCER PREVENTION PROGRAMMING	EXPERIENCED MEMBER ASSOCIATION
<ul> <li>CLIENTS</li> <li>What is the age range of the population currently covered by the Member Association's SRH services? Are they within the recommended age range for cervical cancer screening (30-49 years old)?</li> <li>Is the Member Association reaching women living with HIV? What services does the Member Association offer to women living with HIV?</li> <li>INTERNAL SUPPORT</li> <li>What is the Member Association's motivation for working on cervical cancer?</li> <li>Is there interest among different stakeholders in the organization (e.g. board, leadership, providers)?</li> <li>Are there potential challenges to the acceptability of the cervical cancer prevention programme? By who? What can be done to overcome these challenges?</li> <li>INTEGRATION</li> <li>What does the Member Association's current package of services look like (e.g. components)?</li> <li>What services can potentially be integrated with cervical cancer? Why?</li> <li>Learn more about integration considerations on page 28.</li> <li>FINANCIAL SUPPORT</li> <li>What financial commitments can the Member Association make to introduce a cervical cancer prevention programme?</li> <li>Learn more about the financial resources required on page 25 and 26.</li> <li>STAFF:</li> <li>Are there currently providers that have received trained on screening and treatment (e.g. trained at university)?</li> <li>What does the Member Association's health team look like?</li> </ul>	<ul> <li>CLIENTS</li> <li>What is the age range of the population currently covered by the Member Association's cervical cancer screening services? Are they within the recommended age range for cervical cancer screening?</li> <li>Is the Member Association reaching women living with HIV? Is cervical cancer screening and treatment part of the package of services offered to women living with HIV?</li> <li>TECHNICAL CONSIDERATIONS</li> <li>What method/approach is the Member Association using for cervical cancer screening?</li> <li>Are there opportunities to pilot an emerging method/approach in order to reduce barriers and increase coverage and impact?</li> <li>Does the Member Association have mechanisms in place to offer treatment to women presenting precancerous lesions?</li> <li>What are the strengths and weaknesses of the current programme (e.g. a high number of women do not come back to get the results)?</li> <li>INTEGRATION</li> <li>Are there existing missed opportunities to increase access to cervical cancer prevention within other SRH services?</li> <li>Learn more about integration considerations on page 28.</li> <li>FINANCIAL SUPPORT</li> <li>What financial commitments can the Member Association make to strengthen cervical cancer prevention?</li> <li>Learn more about the financial resources required on page 25 and 26.</li> </ul>

 $^{
m m}$  The WHO does not recommend the introduction of Pap smears in LMIC. For more information, see

https://apps.who.int/iris/bitstream/handle/10665/94830/9789241548694\_eng.pdf;jsessionid=BAE0F5F1945C1A7935DDEF8D519A5BEF?sequence=1.

#### NEW TO CERVICAL CANCER PREVENTION PROGRAMMING

- Is the current workload of health providers compatible with the introduction of a new service?
- Learn more about staff requirements on page 25.



#### **EXPERIENCED MEMBER ASSOCIATION**

#### **STAFF:**

- Is there significant turnover of staff trained on cervical cancer screening and treatment?
- When was the last time staff was trained on cervical cancer prevention (date, duration, content, mentorship received)?
- Learn more about staff requirements on page 25.

#### **PERFORMANCE:**

- Is the current performance (e.g. number of women screened in the target age groups who receive treatment) satisfactory?
- Is the positivity rate the number of screened women who show a positive result – aligned with global and national evidence? (Note: The WHO estimates a positivity rate of approximately 10%).

#### 3. SELECT THE MOST FEASIBLE APPROACH AND SCREENING AND TREATMENT METHODS

Whether a Member Association is new to cervical cancer prevention programming or has prior experience, the identification of the most suitable approach and screening and treatment methods should include the following considerations:

- Existing evidence/recommendations by authoritative sources
- National guidelines (i.e. ability to introduce a method that is not included in such guidelines)
- Existing resources to acquire and maintain screening/treatment supplies and equipment
- Installed capacity in the country/Member Association of intervention i.e. IPPF discourages inexperienced Member Associations from introducing new technologies when there is not installed capacity in the country
- Availability of laboratory services (e.g. for HPV testing, Pap smear<sup>m</sup>)
- Target population capacity and willingness to pay for the method and associated cost (e.g. transport for multiple visits)
- Particular needs of women in the target population (e.g. some screening methods do not allow for immediate results, which means that it is not possible to provide treatment in a single visit)
- The capacity of the organization to make the necessary changes and progress when introducing a new method (i.e. changes in practices and mentality of providers, changes in client flow)

**TIP:** To learn more about the single visit approach, take a look at The Single Visit Approach: A Practical and Effective Approach to Cervical Cancer Prevention. Lessons Learned from our Work in Kenya, Nigeria, Tanzania and Uganda (IPPF, 2017).

<sup>m</sup> The WHO does not recommend the introduction of Pap smears in LMIC. For more information, see <u>https://apps.who.int/iris/bitstream/handle/10665/94830/9789241548694\_eng.pdf;jsessionid=BAE0F5F1945C1A7935DDEF8D519A5BEF?sequence=1.</u>

#### Key facts on secondary prevention approaches

#### • Single visit approach:

- A single visit approach will use a 'screen and treat' or 'see and treat' method, which means the client is treated after the screening results without confirmation of diagnosis. This is meant to prevent loss to follow-up.
- Women who screen positive for pre-cancer services are offered treatment after the screening services. Ideally, the treatment occurs on the same day and at the same location.<sup>20</sup>
- The single visit approach has been successfully implemented in various countries around the world and has shown high acceptability among both service providers and the women who were screened and treated and high safety and effectiveness.<sup>21</sup>
- Experience from IPPF Member Associations indicates that the see and treat approach also has a positive impact on reducing costs, as the need for supplies such as gloves, sterilization products and other commodities reduces when the relevant services are provided in a single visit.

#### • Multiple visit approach:

- This approach requires multiple visits by the client to access the results and treatment.
- A multiple visit approach can lead to missed opportunities and can often result in women with positive results being lost to follow-up.
- While the advantages of a single visit approach are clear, a multiple visit strategy is still valid depending on the budget and capacity of a Member Association. It can also be a cost-effective strategy, as not all service delivery sites will have enough demand (or capacity) to have treatment equipment and trained providers in place.<sup>22</sup>

Examples of the tasks implemented as part of the different approaches are shown below (Figure 3):<sup>23</sup>

#### Figure 3.

VISITS TO FACILITY	CLINICAL MANAGEMENT APPROACH	VISIT 1	VISIT 2	VISIT 3
Single visit	Screen and treat	HPV DNA test + treatment OR VIA/VILI + treatment		
approach	Screen, diagnose and treat	HPV DNA test + colposcopy + treatment		
	Screen and treat	Any screening method	Treatment	
Multiple visit approach	Screen, diagnose and treat	Any screening method	Colposcopy + treatment	
	Screen, diagnose, confirm diagnosis and treat	Any screening method	Colposcopy + confirmatory biopsy	Treatment

#### Who recommendations on choosing screening and treatment methods <sup>24</sup>

Member Associations may choose a different algorithm based on their capacities and the availability of screening and treatment methods in their countries:



#### Brief case study 2.

 In Argentina, the cervical cancer prevention programme recommends a practice known as reflex testing (implementing both an HPV test and cytology during the same visit to increase the number of women detected). To ensure efficient use of limited resources, cytology results are only analysed for women with a positive HPV test.

Source: HPV Manual Argentina

#### 4. CHOOSE SUITABLE SERVICE DELIVERY CHANNELS

IPPF Member Associations often operate through a mix of service delivery channels, including fixed facilities, outreach services (e.g. outreach teams, mobile units), social franchises and/or associated clinics. Organizations introducing a new cervical cancer screening programme should assess which service delivery channel offers better opportunities to increase access and reach the highest number of vulnerable women. Similarly, experienced Member Associations should assess if the current selection of service delivery channels is the most cost effective and/or if there are opportunities to expand the number/type of channels based on new internal or external funding or interest from external stakeholders.

#### Considerations for selecting the most suitable service delivery channels:

The following table provides some tips for selecting the most suitable service delivery channels. Once the service delivery channels have been selected, the Member Association should assess the readiness of the participating service delivery points.



	KEY CONSIDERATIONS			
SERVICE DELIVERY CHANNEL	OFFERS GOOD OPPORTUNITIES TO REACH UNDERSERVED POPULATIONS	OFFERS GOOD OPPORTUNITIES TO SERVE A LARGE NUMBER OF CLIENTS	SUITABLE FOR THE APPROACH AND SCREENING/ TREATMENT METHODS CHOSEN BY THE MEMBER	COST
Fixed facilities	Varies according to location	No	<ul> <li>A point-of-care approach can be implemented.</li> <li>Multiple or single visit approach may work well.</li> <li>All screening and treatment methods may work well.</li> </ul>	Lowest cost, as services can use the infrastructure, systems and resources in place for the provision of other SRH services.
Outreach	Yes	Yes	<ul> <li>Ideally, a single visit approach should be implemented. If this is not possible, the organization must identify mechanisms to ensure timely treatment for positive screenings, e.g. through referral facilities.</li> </ul>	Outreach initiatives are resource intensive, and Member Associations often require support from external donors.
			<ul> <li>Ideally, a single visit approach should be implemented. If this is not possible, the organization must identify mechanisms to ensure timely treatment for positive screenings, e.g. through referral facilities.</li> <li>Screening methods: VIA/VILI and HPV. Self-sampling does not require pelvic evaluation and is therefore suitable for community-based services.<sup>25</sup></li> <li>Cryotherapy, thermal ablation (which weighs only two kilograms) and CryoPen (which can be charged with battery) may be more suitable for a community setting than LEEP.</li> </ul>	
Social franchises / associated clinics	Varies according to location	Yes	<ul> <li>Multiple or single visit approach may work well.</li> <li>All screening and treatment methods may work well.</li> </ul>	This approach requires high levels of investment to ensure a standard quality of care across the network of franchisees/ associates.

#### 5. MAP OUT THE RESOURCES NEEDED

Both human and financial resources are required to introduce and strengthen and sustain a cervical cancer prevention programme. The following points should be considered when calculating the resources needed:

- The number and type of facilities that will implement services
- The number of procedures expected per day
- The time required to implement each procedure"
- The number of providers required to implement the procedures expected per day
- Clients' capacity and willingness to pay for the services
- Costs associated with (or avoided as a result of) integration
- Costs associated with equipment (e.g. treatment methods, if providing the service on-site instead of through referrals)
- Contextual needs (e.g. need to promote political changes to facilitate implementation of the programme, need to consolidate partnerships for advocacy or referrals, etc.)

The table below provides an overview of common resources required for a well-functioning cervical cancer prevention programme<sup>26</sup>:

RESOURCES	EXPLANATION	ASSOCIATED FINANCIAL COST
Staff needs	<ul> <li>Programmatic staff: Including but not limited to: cervical cancer experts, medical directors, clinic managers, monitoring and evaluation experts, communications staff, financial advisers, supply management staff (to coordinate delivery of cryo equipment, gas, etc.).</li> <li>Community health workers: Community health workers play a crucial role in demand creation for cervical cancer prevention, as these services are widely unknown. They also play an essential role in tracking positive clients (e.g. when a multiple visit approach has been prioritized) and in ensuring clients with negative screening results access future screening services.</li> <li>Trained health providers: Nurses, midwives, physicians and other healthcare providers can perform all screening and treatment methods available (Note: For LEEP, it is recommended to have general physicians or gynaecologists in place).</li> </ul>	<ul> <li>Wages of programmatic staff</li> <li>Community educator wages, based on country standards</li> <li>Training for community educators</li> <li>Transportation for community educators</li> <li>Wages of health workers</li> <li>Training for health workers</li> <li>Wages of laboratory staff</li> <li>Training for technicians and laboratory staff</li> <li>Wages of personnel responsible for client follow-up (e.g. receptionist)</li> </ul>

"A minimum of 20 minutes is recommended for each screening to ensure sufficient time to address the needs of the client, implement the service and provide enough time for the paperwork required.

RESOURCES	EXPLANATION	ASSOCIATED FINANCIAL COST
Communications cost	<ul> <li>Raising awareness about cervical cancer and creating demand for services requires the implementation of communication strategies targeted to women (30-49 years old), parents/relevant adults (for HPV vaccinations), younger women and girls (for demand creation of HPV prevention services – e.g. condom use, HPV vaccine, understanding of needs through the life course) and other community members, providers and authorities. Resources such as information, education and communication (IEC) materials delivered both through traditional media and social platforms are required.</li> <li>Key resources for women targeted by secondary prevention services include:</li> <li>Basic information about reproductive health cancers, including the magnitude, causes, risk factors, predisposing factors and preventive measures</li> <li>Tests/treatment explanation materials</li> <li>Self-collection step-by-step guidelines (HPV test)</li> <li>Directions for after-care for women who receive training</li> <li>IEC materials on clients' rights</li> <li>Information on other relevant SRH services, e.g. contraceptives, STIs</li> <li>Key resources for decision-makers:</li> <li>Job aids, step-by-step implementation of each screening/treatment method, flipcharts on contraceptives, other job aids to support integration, counselling guidance, directories for referrals, etc.</li> <li>Key resources for decision-makers:</li> <li>Incidence and associated mortality statistics</li> <li>Summary of evidence and best practices</li> <li>Calls to action</li> </ul>	<ul> <li>Printing and distribution of educational materials</li> <li>Transport costs (e.g. to visit communities and gather testimonials to include in the communication pieces)</li> <li>Materials development and design cost</li> <li>Materials validation cost (e.g. focus groups)</li> <li>Fees to pay for radio and TV spots, social media advertising, etc.</li> </ul>

RESOURCES	EXPLANATION	ASSOCIATED FINANCIAL COST
Equipment and supplies	<ul> <li>Screening and treatment methods (required materials will vary depending on the method prioritized):</li> <li>HPV test: brushes, specimen tubes, HPV test equipment, HPV test processing supplies</li> <li>VIA/VILI: acetic acid or Lugol's iodine, table, lamp, cotton swaps</li> <li>Cytology: spatula and/or small brush, preservative solution or slides, test analysis equipment and supplies</li> <li>Colposcopy: equipment, bivalve specula, vaginal side-wall retractor, cotton swabs, sponge-holding forceps, long (at least 20cm) anatomical dissection forceps, endocervical speculum, endocervical curette, biopsy forceps, cervical polyp forceps and singletoothed tenaculum</li> <li>Biopsy: biopsy forceps, materials for processing and reading specimens.</li> <li>Cryotherapy: equipment, hand unit, rounded cryotips (19 +/- 2) mm in diameter, cryoshaft, o-ring, sealing washers), gas/gas cylinders</li> <li>LEEP: equipment, wire loops, anaesthesia, insulated speculum</li> <li>Thermal ablation: device (temperature dial and probe with attached tip)</li> <li>CryoPen: device, ethanol</li> <li>General supplies:</li> <li>Gloves, cotton swaps, speculum, infection control supplies, examination table, IEC materials, etc. HPV test self-sampling does not require these general supplies. Instead, simple and user-friendly IEC materials are required to ensure women follow the instructions for self-collection.</li> </ul>	<ul> <li>General supplies cost</li> <li>Import fees</li> <li>Transportation of equipment to service facilities</li> <li>Transportation of tests for laboratory analysis (e.g. for cytology)</li> <li>Standard costs, including data collection forms, informed consent forms, maintenance of the facility, etc.</li> <li>Equipment costs (Note: costs are calculated based on figures provided in publications from 2015 -2017):</li> <li>HPV test: CareHPV tests (available to LMIC):</li> <li>Approximately USD \$5 - \$10 per test, while test results analysis machines have an approximate cost of USD \$20,000.</li> <li>GeneXpert HPV test: Approximately USD \$15 per test, while diagnostic equipment has an approximate cost of USD \$17,000.</li> <li>VIA/VILI: A bottle of acetic acid (vinegar) costs between USD \$3 and USD \$5 and can be used to run approximately 90 tests.</li> <li>Cytology: Not available; cost varies significantly from country to country.</li> <li>Colposcopy: cost ranges from USD \$2,000 -\$10,000.</li> <li>Cryotherapy: Machine costs approximately USD \$13 - \$38 per treatment (+ cost of gas transport).</li> <li>LEEP: Full equipment costs approximately USD \$2,000, the instrument cable attaching the probes cost approximately USD \$20,000.</li> <li>Thermal ablation: The device costs approximately USD \$3,000, the electrical unit costs approximately USD \$3,700 and one probe costs approximately USD \$3,700.</li> </ul>

RESOURCES	EXPLANATION	ASSOCIATED FINANCIAL COST
		customized for use in LMICs is projected to cost approximately USD \$2,500 and offers cost-saving benefits by requiring high-level disinfection rather than autoclave sterilization of the probe. <b>CryoPen:</b> The machine costs approximately USD \$4,000.
	<ul> <li>Additional resources to consider for the implementation and sustainability of cervical cancer prevention programmes include the following:</li> <li>Resources to support quality of care, supply chain management (e.g. storing, replacement of faulty methods, expired tests, etc.) and general supervision</li> <li>Resources to support partnership building (e.g. for advocacy purposes, referrals or to conduct outreach services in factories/workplaces)</li> <li>Resources to support client and referral tracking (e.g. mobile technology)</li> <li>Resources to support integration (e.g. to ensure availability of contraceptives for women receiving free or subsidized cervical cancer screening and treatment, to offer HIV services or syndromic management of STIs)</li> <li>Resources to support outreach services (e.g. petrol, per diems, other travel expenses, etc.)</li> </ul>	<ul> <li>Transportation</li> <li>Meeting costs</li> <li>Per diems/accommodation</li> <li>Technology (e.g. mobile phones/applications for tracking)</li> <li>Supplies</li> <li>Subsidies</li> </ul>

#### Brief case study 3.

To ensure a more efficient use of resources, CCSPT partners (IPPF, Marie Stopes International and Population Services International) mapped out their equipment needs in order to implement cryotherapy services and potential strategies for reducing cost while maintaining quality. The partners agreed on implementing centralized procurement system for cryotherapy machines, managed by Marie Stopes International Central Office. Gas cylinders and supplies were procured at the country level, and maintenance of the cryotherapy machines was done by local representatives of the supplier in each country.

Source: CCSPT documentation

#### 6. CONSIDER THE BENEFITS AND POTENTIAL CHALLENGES OF INTEGRATION

Integrating sexual and reproductive health (SRH) services with cervical cancer programmes is recommended as a good practice. However, advantages and potential challenges should be considered: <sup>27, 28, 29</sup>

#### ADVANTAGES OF INTEGRATION

- Reduces the number of client visits to access services and increases the long-term benefits of comprehensive care
- Improves targeting of high-risk populations (e.g. women living with HIV)
- Creates opportunities for cross-learning integration offers training opportunities for service providers to increase their functional skills and knowledge on complementary SRH related topics
- Improves access and uptake of SRH services
- Helps women access stigmatized reproductive health services in a more discreet way
- Offers a more efficient and cost-effective use of resources and infrastructure
- Opens opportunities for income generation, as some clients with capacity to pay will demand other essential services
- Ensures a higher number of clients can benefit from comprehensive services, as integration goes two ways: cervical cancer used as an entry point for other services and vice versa

#### **CHALLENGES OF INTEGRATION**

- Requires increased responsibilities and skills for service providers and high staff turnover
- Potentially longer waiting times, as individual consultations may take longer
- The lack of integrated health management information systems prevents program managers from collecting client level data, making reporting on integrated service delivery difficult
- Increased demand for multiple services increases the need for a robust supply chain for all SRH related goods and services
- Fragmented approach to program funding makes it difficult to provide integrated SRH service

#### Brief case study 4.

Following the devastation wrecked by Tropical Cyclone Gita on the island of Kingdom of Tonga, the Tonga Family Health Association deployed an emergency response team. The team was able to bring vital SRH care to local communities by using cervical cancer and gender-based violence services as entry points.

Source: Tonga Humanitarian Work – Project documentation

Key recommended steps for implementing integrated service delivery include:

- **a.** Analyse the Member Association service package to identify where there are opportunities for integration e.g. is the Member Association providing cervical cancer screening to clients accessing pelvic examinations?
- **b.** Identify implications for the client flow and the internal operation of the organization.
- **c.** Assess the implications for service providers regarding the training required and time per consultation and plan any necessary adjustments accordingly.
- **d.** Implement task shifting measures for services that can be provided by non-physicians.
- e. Mobilize communities via trusted community health workers.
- f. Strengthen management information systems to allow for monitoring of multiple services.
- **g.** Prioritize the implementation of operational research to provide further evidence on the cost effectiveness and benefits of integrated service delivery.

#### Brief case study 5.

A study conducted in Uganda as part of the CCSPT programme found that a) integrating cervical cancer into SRH care appeared to increase demand for other services and b) that integration was an opportunity to bring cervical cancer to new segments of the population, as demonstrated by the fact that a high proportion of the clients reached by the programme had never been screened before.

Source: CCSPT Documentation

#### 7. ESTABLISH SERVICE PROJECTIONS

Recommendations for establishing realistic (but ambitious!) monthly service projections include:<sup>30</sup>

- a. Choose your intervention areas across the country.
- **b.** Estimate the population in the service delivery area (e.g. using information from a census).
- **c.** Estimate the number of females (if unknown, assume 51% of the population is female).
- **d.** Estimate the number of women older than 30 if the data is not available for the service delivery area, use the national percentage.
- **e.** Determine the total number of new screening tests necessary to achieve the desired coverage for the programme. This number can be calculated by multiplying the number of females older than 30 by the per cent of the desired coverage.
- **Note:** This method assumes that no women in the target population have been screened, which is a reasonable assumption in many low-resource settings.
- **f.** Determine the number of new screening tests that must be provided every year to achieve the desired coverage during the target time period. This number can be calculated by dividing the total number of new screenings by the number of years projected for the programme and then dividing by12 to get the monthly target.

**MPLE** 

The intervention area has a population of 500,000 inhabitants. Because there is no local data available, we assume that 255,000 are female (51%). National data shows that approximately 70% of women are older than 30, which means a total of approximately 178,500 people. The programme is expecting to cover 80%° of the population, or 142,800, over a period of three years (to keep things simple, this calculation assumes only one screening per woman, but don't forget that the WHO recommends at least two screenings per woman between 30 and 49 years old). This means that nearly 4,000 women need to be screened per month.

#### **STEP 2. IMPLEMENTING CERVICAL CANCER PREVENTION PROGRAMMES**

#### **1. TRAIN AND MENTOR HEALTH SERVICE PROVIDERS**

Recommendations on training/refresher training (number of hours, practice time required for certification, etc.) will depend on the specific screening and treatment methods prioritized. In all cases, however, it is important to:

- ensure training focuses on competencies, combining both didactic and hands-on approaches
- ensure that the clinical setting used for training purposes resembles the service-delivery conditions at the programme site
- minimize disruption to other services provided at the facility by planning the training at convenient times and dates
- dedicate time to ensure providers understand the principles of rights-based service delivery
- see training as a continuum of efforts, which include initial group training, one-on-one coaching and mentorship, refresher training and peer review processes (where providers exchange information on challenging cases, good practices, etc.)
- ensure availability of training for new staff (e.g. by having a pool of master trainers or using master trainers certified by the government)

Training can include different teaching techniques, such as lectures, role-playing, taking practice samples with gynaecological models and discussing different situations or questions that might arise. It is important to evaluate participants' knowledge at the end of the training, as well as to routinely supervise and monitor clinical skills and hold refresher training if needed.<sup>31</sup>



The table below provides general guidelines on training for specific screening and treatment methods.<sup>32</sup>

SCREENING OR TREATMENT METHOD	ESSENTIAL CONTENT
All	Client rights, counselling skills, informed consent, anatomy of the female reproductive system, natural history of cervical cancer, HPV, data collection, referral mechanisms, context-specific content (e.g. in countries with high prevalence of female genital mutilation, content should include any implications this may have for screening).
HPV TESTING	Basic principles of how HPV tests detect the virus, populations that need to be screened, supplies and materials needed for HPV testing and how it will be done, who will take the sample for HPV testing and how the tests will be processed, how HPV test results are provided to women, how to communicate HPV test results to women and what an HPV test result means, whether positive or negative.
VIA/VILI	Basic principles of how VIA/VILI is used to detect a potential lesion, populations that need to be screened, supplies and materials needed for VIA testing, correct procedures and necessary visual skills for VIA/VILI, interpretation of VIA results, how test results are communicated to women, common errors.
CYTOLOGY	Correct procedures for sample taking, understanding and explaining results, when to refer to other tests, common errors Note: Cytotechnologists should be included in training activities to exchange information on common errors, and their skills should be assessed on a regular basis through supportive supervision.
COLPOSCOPY	Indications for colposcopy, instrumentation, principles and documentation of results, step-by- step examination, colposcopic appearance of normal cervix, colposcopic assessment of cervical intraepithelial neoplasia (CIN), other diagnosis, avoiding errors in diagnosis.
CRYOTHERAPY	Eligibility, cryo equipment, step-by-step procedure (using double freeze technique -three minute freeze, five-minute thaw, three-minute freeze), complications, aftercare and follow-up.
LEEP	Eligibility, step-by-step procedure, advantages of LEEP, excision vs. ablation, LEEP equipment, electrosurgery, electrosurgical coagulation for hemostasis, desiccation, fulguration, puncture coagulation, electrodes and LEEP equipment, LEEP excision, ecto and endocervical excision,
THERMAL ABLATION	Eligibility, step-by-step procedure, complications, aftercare and follow-up
CRYOPEN	Eligibility, step-by-step procedure, complications, aftercare and follow-up

**TIP:** If resources permit, ensure there are at least two trained providers at each facility/on each outreach team to avoid disruption of services in case of staff turnover.

#### 2. DEVELOP AND DISSEMINATE INTERNAL PROTOCOLS AND GUIDELINES

The availability of internal protocols is a necessary step for the implementation of any health service. When it comes to secondary prevention of cervical cancer, it is important to have the following guidelines and structures in place, based on national guidelines, recent evidence and each Member Association's capacity to provide services:

- Counselling guidelines
- Privacy and confidentiality guidelines
- Informed consent-taking guidelines
- Guidelines to provide the selected screening method
- Guidelines to provide the selected treatment method
- Infection control guidelines
- Guidelines for maintenance of necessary equipment
- Guidelines for the provision of other essential services

See the section **"Want to know more? Recommended resources"** (page 44) to access tools developed by authoritative organizations.



#### **3. CREATE DEMAND FOR INTEGRATED SERVICES**

Demand creation refers to any efforts aimed at stimulating potential clients to understand they need a specific service or product. Demand for cervical cancer prevention services does not always exist, as information on HPV, precancerous lesions and alternatives for screening and treatment is not widely available. Demand creation can be supported by complementary strategies, including but not limited to:

#### · IEC activities

**Key messages:** HPV is preventable, cervical cancer is preventable, there is screening available to detect precancerous lesions, there is simple treatment available to treat precancerous lesions, cervical cancer is caused by persistent infection with HPV, having HPV or a lesion does not mean you have cancer, accessing screening services can be life saving, there is no reason to feel ashamed if you are found to have precancerous or cancerous lesions

**Outlets:** Traditional media (e.g. radio talk shows) and social media (e.g. target advertisements to women in the target age group)

**Guidelines to develop IEC materials on cervical cancer prevention:** Develop brief, simple and direct messages; use images women can relate to; use testimonials from cervical cancer survivors; use testimonials of satisfied screening clients; be clear about the facilities where women can access the services (address, website, phone number, dates of outreach activity, others)

Annex 1 and 2 provide examples of a poster and a brochure that can be adapted by Member Associations to promote cervical cancer prevention.

#### • Team up with influencers

**What are influencers**? In marketing, influencers are individuals who have the ability to influence the opinions or buying decisions of a target audience. In the case of cervical cancer prevention, influencers play a role in generating demand for screening and treatment. Influencers can have different profiles, including artists, community leaders, a woman living with HIV, a leader among sex workers, religious leaders, teachers, traditional healers, etc.

**How to involve influencers:** Once the Member Association has identified potential influencers, it's time to get them on board. Provide them with technical training, strengthen their communication skills and invite them to visit the services so that they feel confident about what the organization has to offer. It is a good idea to map out the specific activities or events that can be used by the influencer to spread messages on cervical cancer prevention.

#### Active search for clients

What does active search mean? Active search refers to activities implemented to find and invite women in the recommended target age range/profile to access cervical cancer prevention services. Examples of these activities include home visits, talks for moms of girls who are involved with HPV vaccination programmes, targeting women who access antiretroviral treatment in partner organizations, etc.

Who can support the active search for clients? Community health workers or navigators, other volunteers and community-based staff, among others.

#### Promote cervical cancer screening through other SRH services

**What does this mean?** Having IEC materials on cervical cancer in the waiting rooms of SRH facilities, ensuring providers are trained to disseminate key messages on available cervical cancer prevention services during SRH consultations (e.g. during STI services), including cervical cancer screening as part of a bundle ("combo") with no/minimal additional cost implications for the client.

#### Brief case study 5.

The IPPF Member Association in Ethiopia has created demand for cervical cancer prevention by implementing awareness-raising programs in the Model Clinic and Confidential Sex Worker Clinic and at three work-place areas: Ethiopia pulp and paper factory, Bekelcha transport share company and Ethiopia Pharmaceutical Fund and Supplies Agency Adama branch. The sessions include information on this topic, as well as an explanation of the services offered by the organization.

Source: IPPF Cervical Cancer Scale Up Fund – Project documentation

#### 4. REFER WOMEN TO EXTERNAL AND INTERNAL SERVICES

Secondary prevention of cervical cancer requires strong referral systems, particularly when a multiple visit approach has been prioritized. Privacy and confidentiality must be ensured during the referral process. Figure 5 shows examples of a client flow for women receiving cervical cancer screening using a single and multiple visit approach and highlights the role of internal and external referrals in the process.



#### Preconditions for developing strong referral systems

**Partnership building**: The following steps should be taken once organizations have mapped out the facilities that can complement the service package offered (e.g. tertiary cervical cancer prevention):

- Sign memorandums of understanding with collaborating partners.
- Co-develop a referral protocol, including details on mechanisms for the referral, follow-up for completed referrals, main contact person (e.g. obstetrician from the high-level facility), referral forms to be used, counter-referral mechanisms and data sharing and analysis, minimum practices to ensure privacy and confidentiality in referral sites, among others.
- Develop a directory of services and distribute it to service providers.

#### Use a client-centred approach in the planning and implementation of referral mechanisms:

Women may face challenges when it comes to follow-up appointments, e.g. it might be difficult to cover transportation cost to visit the referral facility. For cases of women who show signs of cancer, a referral to a more complex facility may also require travelling long distances, being absent from their jobs and covering accommodation costs. While these challenges may be too significant to be addressed by a single organization, they should be considered in the design stage to assess the likeability of introducing cash support for those who need it or of partnering with other stakeholders that offer this type of support. It is important to keep in mind the challenges faced by women to access tertiary care referral sites, as this can inform the organization's advocacy strategy on cervical cancer.

**TIP:** Experience from IPPF Member Associations indicates that using a single visit approach yields better results for improving treatment rates than referrals.

See Annex 3 to access examples of referral forms.



#### **5. ASSESS QUALITY**

Quality assurance systems are essential to ensure that cervical cancer screening and treatment services effectively generate long-term reductions in cervical cancer-related mortality. IPPF's quality of care framework identifies seven key elements related to the provision of quality services, in line with the IPPF membership standards and based on IPPF's Charter of Client Rights and Provider Needs (1993): a safe and confidential environment, comprehensive integrated services, well-managed services, highly skilled and respectful personnel, secured supply chain management system, adequate financial resources, effective communication and feedback systems.

For cervical cancer screening and treatment services, working towards guaranteeing these seven elements requires the following key elements:

#### **KEY ELEMENTS:**

**Safe and confidential environment:** Appropriate set-up structure to support client flow from counselling to screening/treatment services and integrated services, accessible location, safe environment for both providers and clients, privacy and confidentiality

**Comprehensive integrated services:** Cervical cancer services integrated to other SRH services, comprehensive information on cervical cancer prevention, implementation of measures to reduce loss to follow-up (when a multiple visit approach is used), reliable referral system if treatment is not available at the same service delivery point or for tertiary prevention facilities, service delivery based on latest evidence on cervical cancer prevention, informed client decision-making and consent for screening and treatment, measurements in place to correct cases of overdetection/overtreatment or false-negative results

**Well-managed services:** Selection of single/multiple visit approach based on analysis of capacities and effectiveness analysis; effective supportive supervision (e.g. mentorship and coaching for skills development, particularly when using methods like VIA, which require time and practice to develop); performance-driven culture, including assessing positivity rate and the number of positive women that receive treatment; client-driven demand for services and good clinical governance

**Highly skilled and respectful personnel:** Sufficient staff trained and coached in the provision of rights-based cervical cancer prevention services

**Secured supply chain management system:** Availability of devices, gas, etc. according to screening/treatment methods chosen, reliable procurement services (e.g. to ensure availability of gas), availability of good quality supplies for the provision of integrated services, prevention of stock-outs through good projections and systems, follow-up on life and maintenance of equipment

**Adequate financial resources:** Adequate financial resources to sustain all components of cervical cancer prevention programming, resources to support non-refusal policy

**Effective communication and feedback systems:** Community participation in needs assessments, community support/buy-in, mechanisms in place to involve clients in service assessment mechanisms

See Annex 4 to access a quality assurance tool for VIA and cryotherapy services developed as part of the CCSPT initiative. This tool can be further adapted to include other screening and treatment methods.

#### Brief case study 6.

In order to strengthen the quality of their services and better understand the obstacles and facilitating factors for accessing cervical cancer screening and treatment, the Albanian Center for Population and Development conducted a study using quantitative and qualitative methods. Clients, previously unscreened women, and providers were all involved in the process.

Source: IPPF Cervical Cancer Scale Up Fund – Project documentation

#### 6. USE LESSONS LEARNED TO INFORM ADVOCACY

Advocacy is defined as a set of political actions implemented according to a strategic plan that are meant to focus the attention of the community on a specific problem and guide decision-makers toward a solution. Lessons learned and challenges identified during programme implementation should be used to inform Member Association's advocacy on cervical cancer. The following issues are examples of potential advocacy objectives:

- Ensuring national guidelines conform to the most up-to-date evidence (e.g. methods used, task sharing/task shifting for cervical cancer)
- Ensuring the government commits to scaling up a national cervical cancer prevention programme
- Ensuring national cervical cancer strategies consider the barriers women face to access primary, secondary and tertiary prevention
- Ensuring the government commits to participating in demonstration projects (e.g. for the introduction of HPV immunization programmes)
- Ensuring policies support primary prevention components, including comprehensive sexuality education and access to condoms
- Ensuring national strategies consider multiple complementary strategies, to put them on the path towards achieving the elimination of cervical cancer.

A successful advocacy strategy should be evidence-informed and focus on political change and accountability. Key actions to conduct this work include the identification of the advocacy issue/need, partnership building, political analysis, mapping of actors, the implementation of combined strategies (evidence collection, IEC, social mobilization, media positioning, public relations, etc.) and monitoring to ensure the effective implementation of changes.



#### Brief case study 7.

With support from PATH and other stakeholders, Guatemala became the first Central American country to update its cervical cancer screening guidelines to reflect the evidence presented in the WHO guidelines, with adaptations suited to the local context. PATH catalysed a partnership and advocacy initiative in 2013, bringing partners together and compiling and mobilizing the evidence to motivate policy change. PATH collaborated with two other critical non-governmental partners that brought additional assets to the advocacy effort: the Union for International Cancer Control (UICC) and Instancia por la Salud y el Desarrollo de las Mujeres (Instancia). UICC provided critical funding for revising the guidelines, as well as advocacy support. Instancia, a local women's health organization, offered policy advocacy and accountability expertise gleaned through many years of working with the local Ministry of Health to improve women's health services through formulating policies, overseeing service provision and fiscal monitoring.

Source: Path. Advocacy impact case studies. Preventing cervical cancer through better guidelines in Guatemala

**TIP:** Advocacy to introduce cervical cancer prevention programmes can be supported by the costing tools developed by the WHO. To learn more, visit: <u>https://www.who.int/immunization/diseases/hpv/cervical\_cancer\_costing\_tool/en/</u>



#### **STEP 3. MONITORING AND EVALUATION**

#### **1. COLLECT AND USE DATA TO IMPROVE**

Qualitative and quantitative data should be **collected**, **validated**, **safely stored**, **analysed and periodically used** to ensure the programme is reaching its goals. In order to assess the contributions of a Member Association program to national level data (including to the reduction of incidence and mortality), it is important to use indicators recommended by the local Ministry of Health or national health departments.

#### Examples of indicators and questions for data analysis and use include:

#### **KEY QUESTIONS INDICATOR/DATA TO BE COLLECTED** Gynaecology - Counselling - Pre-test - Cervical cancer Are there significant variances in Prior to performing the screening, a trained counsellor/service the number of services/clients provider provides client-specific, non-directive advice about served from one month to cervical cancer screening in a space that facilitates another? If so, what does the confidentiality to ensure the client is aware of the screening Member Association attribute process and the advantages and implications of knowing the these variances to? results. Gynaecology - Counselling - Post-test - Cervical cancer In a space that facilitates confidentiality, a trained Consult IPPF Secretariat for the most updated version, as needed counsellor/service provider provides client-specific, nondirective advice about the results of the cervical cancer screening after the screening result has been confirmed to give the client emotional support and establish any necessary follow-up. Gynaecology - Prevention - Screening - Pap smear (sampling procedure) After the client has received pre-test counselling and given their informed consent to send the sample for analysis, a trained service provider uses a speculum to open the vaginal canal and collect a sample of cells from the cervix in a space that facilitates confidentiality. Gynaecology - Prevention - Screening - Pap smear (lab test) After the client has received pre-test counselling and given their informed consent in a space that facilitates confidentiality, a trained service provider or lab technician looks under a microscope at the smear taken during the sampling procedure to assess for signs of pre-cancerous or cancerous changes. **Gynaecology - Prevention - Screening - Visual** inspection (VIA or VILI) After the client has received pre-test counselling and given their informed consent, a trained service provider stains the client's cervix with acetic acid (VIA) or Lugol's iodine (VILI) and inspects it visually for signs of precancerous or cancerous changes. Gynaecology - Prevention - Screening - unable to categorize

A trained service provider provides a client with a gynaecology prevention service as specified on the service list.

Gynaecology - Management - Surgical - Cryosurgery After the client gives voluntary and informed consent, a trained service provider uses a cryotherapy gun to apply

# PPF service statistics (and definitions) Note: these definitions are regularly updated

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**KEY QUESTIONS** 

IPPF service statistics (and definitions)	<ul> <li>extreme cold and destroy abnormal tissue when abnormalities have been detected during screening for cervical cancer in a suitable facility that is equipped to handle life-threatening situations if necessary and where universal precautions are adhered to and privacy is ensured.</li> <li><b>Gynaecology - Management - Surgical - Cauterization</b> After the client gives voluntary and informed consent, a trained service provider uses a cautery device to apply heat and destroy abnormal tissue when abnormalities have been detected during screening for cervical cancer in a suitable facility that is equipped to handle life-threatening situations if necessary and where universal precautions are adhered to and privacy is ensured.</li> <li><b>Gynaecology - Investigation - Diagnostic Imaging - Colposcopy</b></li> <li>After the client has given informed consent, a trained service provider uses a colposcope to visualise the cervix, vagina and vulva of the client to look for premalignant or malignant lesion(s) in a space that facilitates confidentiality.</li> </ul>	
Client data	<ul> <li>Total number of women screened for cervical cancer (by type of facility and age)</li> <li>Total number and % of women screened who are HIV positive</li> <li>Total number and % of women screened for the first time</li> <li>Total number of women screened and tested with positive results (by type of facility and age)</li> <li>Number of women screened and tested positive who are eligible for treatment (e.g. cryotherapy) (by facility)</li> <li>Number of positive women treated by the Member Association services (by facility)</li> <li>Number and % of women treated by the Member Association services who received the single visit approach (see and treat approach)</li> <li>Number of positive women referred to an external provider (by the facility where the referral was made)</li> <li>Number of cervical cancer prevention clients who receive another SRH service in the same visit (by type of service)</li> </ul>	<ul> <li>What is the positivity rate (number of women screened against number of women with positive results)? Is the positivity rate too low/too high according to existing guidelines? What factors may be contributing to this trend?</li> <li>Are 100% of women that are eligible for treatment receiving the necessary services? If not, what factors may be contributing to this trend? Are there improvements/negative changes from the last reporting period?</li> <li>What percentage of women is accessing a single visit approach? Is there room for improvement in the implementation of this strategy?</li> <li>What does the Member Association's referrals performance look like (analysis</li> </ul>

**INDICATOR/DATA TO BE COLLECTED** 

	INDICATOR/DATA TO BE COLLECTED	KEY QUESTIONS
		of completed referrals)? What factors may be contributing to this trend? Is there room for improvement in the implementation of referral mechanisms?
Programmatic data	<ul> <li>Number of trained providers (by facility)</li> <li>For cytology/DNA testing – Number of unsatisfactory tests (by provider)</li> <li>For cytology/DNA testing – Average time to deliver test results</li> <li>Number of clients receiving subsidized/free services (by facility)</li> <li>Assessment of missed opportunities – e.g. Compare "Number of women (30-49 or younger based on population prioritized in the local context) who received pelvic examinations in the last quarter" against "Number of women (30-49 or younger based on population prioritized in the local context) who received pelvic examinations in the last quarter"</li> <li>Screening deficit – Target population for cervical cancer screening in one year – Number of women who received cervical cancer screening services in one year/Target population for cervical cancer screening in one year are service in one year.</li> <li>Qualitative data regarding the most significant changes:         <ol> <li>Over the last six months, what have been the main changes in the way cervical cancer related services are provided in your community or clinic? Why are these changes important?</li> <li>What factors/actions have contributed to these changes?</li> <li>Are these changes sustainable?</li> <li>Describe any partnerships that have contributed to the implementation of your interventions.</li> <li>What are the lessons learned from the program implementation to date?</li> </ol> </li> </ul>	<ul> <li>Based on local HPV rates/prevalence by age group, is the initiative reaching the women most at risk? Explain</li> <li>Is the organization on track with the expected results?</li> <li>Is compliance with expected results realistic based on the current level of performance?</li> </ul>
Impact indicators	<ul> <li>Cervical cancer incidence: Age-specific cervical cancer incidence in a defined population of disease-free individuals in a given period</li> <li>Cervical cancer mortality: The number of deaths from cervical cancer occurring in a given period in a specified population</li> <li>Note: Remember that impact is often the result of interventions by multiple actors.</li> </ul>	• Are there positive changes in cervical cancer incidence and mortality in the intervention areas?

<ul> <li>Barriers and facilitators to accessing services</li> <li>Perception of quality of services received</li> <li>Understanding of screening results</li> <li>Understanding of next steps (in case of having received a referral or a treatment service)</li> <li>Clarity about the need to come back for future screening</li> </ul>		INDICATOR/DATA TO BE COLLECTED	KEY QUESTIONS
interviews, focus groups, surveys and other techniques.	Qualitative data – client perspectives	<ul> <li>Barriers and facilitators to accessing services</li> <li>Perception of quality of services received</li> <li>Understanding of screening results</li> <li>Understanding of next steps (in case of having received a referral or a treatment service)</li> <li>Clarity about the need to come back for future screening</li> <li>Note: Qualitative data can be gathered through in-depth interviews, focus groups, surveys and other techniques.</li> </ul>	• Do clients' testimonials flag potential areas for quality

#### Data management: confidentiality, data protection and back up IPPF recommends Member Associations follow these practices to ensure data protection:

- Never disseminate personally identifiable information to external parties without individual consent and adherence to local regulations.
- Safely store copies of programme progress reports and financial reports at all levels.
- Safely store any quality assurance reports produced as part of the cervical cancer programme using existing systems at the local level.

IPPF recommends that Member Associations have a written data backup procedure in place that is familiar to and used by all staff members. This recommendation is not exclusive to cervical cancer programmes. As a minimum, this protocol must outline:

- What to backup, e.g. client data, service statistics, project records
- Where to back up, e.g. hard drive, cloud, physical copies in a locked cabinet
- Frequency of backup, e.g. once a week
- Responsible person, e.g. IT person, project coordinator, etc.
- What to backup, e.g. client data, service statistics, project records
- Where to back up, e.g. hard drive, cloud, physical copies in a locked cabinet
- Frequency of backup, e.g. once a week
- Responsible person, e.g. IT person, project coordinator, etc.

#### 2. SHARE LESSONS LEARNED WITH THE BROADER MOVEMENT

Cervical cancer prevention is an evolving field, with many actors involved in creating lasting impact. Documentation and dissemination of best and promising practices, lessons learned, and outcomes of the implementation of different strategies (single visit approach, multiple visit, co-testing) contribute to efforts by the wider movement. Included below are some examples of actions that a Member Association can implement to document and share experiences with others:

• **Conduct operational research:** Operational research is meant to assess the effectiveness, acceptability and replicability of specific strategies implemented within a programme.

#### Brief case study 8.

As part of the CCSPT initiative, partner organizations commissioned operational research in 2015 to analyse the modes and effectiveness of referral methods for further treatment of women that screened positive. The study, implemented in Uganda, demonstrated that the greatest barrier to referral treatment completion was cost and geographical distance. The lessons from this operational research led to the implementation of an intensification strategy focused on the use of the single visit approach, and these results have been widely shared with other organizations working in the field.

**Source:** CCSPT project documentation

- Submit abstracts/papers to specialized conferences: Guidelines for submitting abstracts/papers can be found on the websites/social platforms of the conference organizers. Topics of interest to the movement include outcomes of the integration of cervical cancer and SRH services, good practices to reduce loss to follow-up, mechanisms to strengthen referrals and the introduction of new technologies (acceptability, barriers, etc.). Relevant conferences for sharing this information include the International Conference on Family Planning, HIV conferences, Women Deliver, FIGO meetings, UICC World Conferences on Breast and Cervical Cancer and the Global Conferences on Non-Communicable Diseases, among others.
- **Panellists:** Participate as a speaker at global, regional and national events on best and promising practices in cervical cancer programming to share lessons learned and exchange experiences.
- **Peer review articles:** Journals offer a good platform to share evidence and lessons learned in the implementation of cervical cancer programming.

#### Brief case study 9.

Back in 2017, CCSPT partners published the article "Integrating cervical cancer screening and preventive treatment with family planning and HIV related services" in the International Journal of Gynecology & Obstetrics. In 2018, IPPF Member Associations submitted seven abstracts to the Journal of Global Oncology, to share lessons learned and recommendations to implement secondary prevention initiatives in diverse settings.

Source: <a href="https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1002/ijgo.12194">https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1002/ijgo.12194</a>;

• **Develop and disseminate short publications:** Brochures, case studies, blogs or booklets can be a good way to document lessons learned and provide tips for good practice. See <u>https://www.ippfar.org/search?s=cervical+cancer for</u> <u>examples of cervical cancer prevention good practices publications.</u>

- Webinars: Stakeholders such as Cervical Cancer Action organize webinars to bring the latest information and experience in global cervical cancer prevention to interested parties. Joining as a speaker or participant can provide a platform to share the Member Association's experiences. See http://www.cervicalcanceraction.org/multimedia/multimedia.php.
- **Communities of practice:** Setting up communities of practice for knowledge sharing and discussion on good practices can provide motivation to staff members involved in service provision and programme management.

#### STEP 4. ASSESSING THE FEASIBILITY OF SCALING UP/DOWN

Cervical cancer-related initiatives often start as demonstration projects aimed to serve two purposes: 1) enable stakeholders to learn enough about implementation issues so that the process from research to wider expansion and institutionalization is more feasible, and 2) enable stakeholders to extract generalizable information for the eventual development of guidelines and tools. Many demonstration projects, however, never scale up, due to a lack of political will, lack of resources, identification of other more pressing needs in the community and other issues. Close monitoring of the initiative and ongoing dialogue with the community will ensure a Member Association has enough information to make decisions regarding the need to scale up/down a cervical cancer prevention programme. Note: Scaling down does not mean that Member Associations no longer need to implement secondary prevention programmes. It just means that in some scenarios, Member Associations will need to reduce the number of service delivery points or intervention areas to better respond to changes in the context, need and the human and financial resources available.

If a Member Association has decided it is time to scale up an initiative, the following steps can be helpful (See Figure 7).

Figure 7.

Assess your own capacities for sustained scale up of services (staff, resources, service delivery channels, etc.) Implement a cost analysis (e.g. economies of scale when serving more women, costs of required providers, etc.) Put a management structure in place to monitor the programme across all service delivery points involved (ensure this structure does not work in isolation). Establish projections for the scale up process (e.g. how many areas or facilities per quarter). Roll out the programme. If needed, scale down when data/dialogue with the community indicates the programme is no longer needed in a community.

# Good practices in cervical cancer programming

This section complements the step-by-step guidance by summarizing promising practices documented during previously implemented cervical cancer programmes. Emphasis is placed on practices that help reduce financial and social barriers to accessing services, prevent loss to follow-up, and generate an enabling environment for the provision of sustainable programmes.

PRACTICE	Create awareness of cervical cancer prevention among men and family members to reduce social barriers that impact women's capacity to access screening and treatment services.
OBSERVED RESULTS	<ul> <li>Increased number of men mobilize women to access cervical screening tests</li> <li>Improved knowledge among men and family members on cervical cancer prevention</li> <li>More supportive attitudes towards women's access to services</li> <li>Increased number of women who are able to access integrated services (when women come to receive cervical cancer care, they can access other services often stigmatized by their partners and community)</li> <li>Increased number of women who can follow self-care measures after receiving ablative treatment (e.g. more men understand the importance of abstaining from sex during the recommended recovery period for women that received treatment)</li> </ul>
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Identify men/families the Member Association should target in its intervention areas.</li> <li>Implement knowledge, attitudes and practices surveys to assess how myths, misconceptions and gender norms affect men's behaviour.</li> <li>Define the changes the Member Association would like to achieve and how those changes contribute to women's increased access to cervical cancer prevention services.</li> <li>Identify strategies to engage men and family members (through mass media and community committees, during pre/post cervical cancer counselling previous if the woman consents, etc.)</li> <li>Develop key messages the Member Association would like to disseminate through the different strategies. Make sure to validate them with men/members of the community!</li> <li>Monitor the level of success (pre-test/post-tests, focus groups, interviews with men and women, etc.)</li> <li>Compare service data to assess if the strategy is having an impact on women's access to services.</li> </ol>

#### **INVOLVE MEN AND FAMILIES**

#### **INVOLVE COMMUNITY LEADERS**

OBSERVED RESULTS• Increased availability of resources to implement outreach services, e.g. local MPs commit/leverage funds to support women in their communities access screening and treatment, as neededOBSERVED RESULTS• Increased number of allies for cervical cancer advocacy (short-term) • Increased number of allies that support SRH and rights (mid-term) • Improved knowledge among community leaders on cervical cancer prevention strategies • More supportive attitudes towards women's access to services • Increased number of women accessing cervical cancer prevention and SRH servicesImproved knowledge among community leaders in the areas of intervention (including their level of influence, decision-making power, previous record on supporting SRH issues or initiatives from the organization, capacity to commit resources, etc.)2. Define what changes the Member Association would like to achieve by working with community leaders and how those changes contribute to women's increased access to cervical cancer prevention services.3. Implement knowledge, attitudes and practices surveys (if relevant based on the expected changes).4. Organize one-on-one meetings to discuss cervical cancer and the Member Association's compackage of services.5. Invite community leaders to learn more about the Member Association's comprehensive package of services.6. Provide support for community leaders to disseminate messages (e.g. training them on media skills, formulating key messages, etc.).7. Establish indicators to assess if the strategy is having an impact on women's access to services.8. Monitor the success of the strategy and adapt as needed.9. Compare service data to assess if the strategy is having an impact on women's access to services.	PRACTICE	Engage community leaders to mobilize women to attend integrated outreach services.
<ul> <li>RECOMMENDED STEPS FOR IMPLEMENTATION</li> <li>1. Map out community leaders in the areas of intervention (including their level of influence, decision-making power, previous record on supporting SRH issues or initiatives from the organization, capacity to commit resources, etc.)</li> <li>2. Define what changes the Member Association would like to achieve by working with community leaders and how those changes contribute to women's increased access to cervical cancer prevention services.</li> <li>3. Implement knowledge, attitudes and practices surveys (if relevant based on the expected changes).</li> <li>4. Organize one-on-one meetings to discuss cervical cancer and the Member Association's expectations of their potential support.</li> <li>5. Invite community leaders to learn more about the Member Association's comprehensive package of services.</li> <li>6. Provide support for community leaders to disseminate messages (e.g. training them on media skills, formulating key messages, etc.).</li> <li>7. Establish indicators to assess the level of success of this partnership (e.g. the number of outreaches co-organized with the support of community leaders).</li> <li>8. Monitor the success of the strategy and adapt as needed.</li> <li>9. Compare service data to assess if the strategy is having an impact on women's access to services.</li> <li>10. Maintain a close relationship with community leaders, engaging them in other SRH and rights initiatives.</li> </ul>	OBSERVED RESULTS	<ul> <li>Increased availability of resources to implement outreach services, e.g. local MPs commit/leverage funds to support women in their communities access screening and treatment, as needed</li> <li>Increased number of allies for cervical cancer advocacy (short-term)</li> <li>Increased number of allies that support SRH and rights (mid-term)</li> <li>Improved knowledge among community leaders on cervical cancer prevention strategies</li> <li>More supportive attitudes towards women's access to services</li> <li>Increased number of women accessing cervical cancer prevention and SRH services</li> </ul>
	RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Map out community leaders in the areas of intervention (including their level of influence, decision-making power, previous record on supporting SRH issues or initiatives from the organization, capacity to commit resources, etc.)</li> <li>Define what changes the Member Association would like to achieve by working with community leaders and how those changes contribute to women's increased access to cervical cancer prevention services.</li> <li>Implement knowledge, attitudes and practices surveys (if relevant based on the expected changes).</li> <li>Organize one-on-one meetings to discuss cervical cancer and the Member Association's expectations of their potential support.</li> <li>Invite community leaders to learn more about the Member Association's comprehensive package of services.</li> <li>Provide support for community leaders to discuss of this partnership (e.g. the number of outreaches co-organized with the support of community leaders).</li> <li>Monitor the success of the strategy and adapt as needed.</li> <li>Compare service data to assess if the strategy is having an impact on women's access to services.</li> <li>Manitain a close relationship with community leaders, engaging them in other SRH and rights initiatives.</li> </ol>

#### PARTNER WITH WORKPLACES TO INCREASE ACCESS

PRACTICE	Engage factories and other workplaces to finance integrated outreach services and reduce key barriers to accessing cervical cancer prevention services.
OBSERVED RESULTS	<ul> <li>Increased availability of resources to implement outreach services, e.g. workplaces may commit to financing the services as part of their social responsibility unit</li> <li>Improved knowledge of cervical cancer prevention among women</li> <li>Increased number of women accessing cervical cancer prevention and SRH services</li> <li>Reduced financial barriers to access integrated services</li> <li>Reduced loss to follow-up, e.g. it is easy to track clients if a multiple visit approach is used</li> </ul>
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Map out factories within reach of the Member Association's outreach teams.</li> <li>Establish contact – introduce the organization, its work, some key messages on the importance of cervical cancer prevention and why the factory may be a good setting to offer the service (e.g. women in the target age group). Discuss the possibility of offering integrated services.</li> <li>Agree on financial issues.</li> <li>Provide information and education sessions to female workers and invite them to access the services.</li> <li>Offer services (ideally using a single visit approach, to reduce costs).</li> <li>Provide follow-up services, as needed.</li> <li>Maintain contact with staff to organize future visits.</li> </ol>

#### **USE NAVIGATORS**

PRACTICE	Using navigators (i.e. community health workers) to help women with abnormal results navigate the health system and overcome barriers to attaining appropriate and timely care.
OBSERVED RESULTS	<ul> <li>Increased number of women with abnormal results who receive treatment of precancerous lesions or tertiary care</li> <li>Reduced delays in accessing care by women with abnormal results</li> <li>Reduced dropouts of women with abnormal results from the treatment process</li> <li>Increased client satisfaction</li> </ul>
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Establish a pool of trained navigators.</li> <li>Allocate resources to ensure navigators can provide individualized support to women.</li> <li>Establish a systematic procedure to identify individuals with abnormal results or cancer that need follow-up care.</li> <li>Contact clients and gather information concerning the barriers to continuity of care for diagnosis and treatment.</li> <li>Implement individualized navigation support.</li> <li>Monitor the results of the initiative (e.g. Has there been an increase in treatment rates since the inception of the strategy?)</li> </ol>

#### INNOVATE TO INCREASE CLIENT TRACKING USING MOBILE PHONES

PRACTICE	Using mobile phones to track health information and reach clients with information on cervical cancer, invitations to access screening services, follow-up after a screening service, etc.	
OBSERVED RESULTS	<ul> <li>Increased awareness of cervical cancer prevention and treatment</li> <li>Increased rate of completed referrals for treatment</li> </ul>	
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Assess the relevance of the initiative – Is mobile technology widely available among women in your intervention areas?</li> <li>Partner with experts in mobile phone solutions for the health sector.</li> <li>Consult the target populations (women, providers, administrative staff who would be populating data) during the development of the mobile phone solution.</li> <li>Pilot the mobile phone solution.</li> <li>Scale up the solution. Make sure you use the information generated to follow up with clients and make informed programmatic decisions.</li> </ol>	

#### **ENSURE GOOD FINANCIAL MANAGEMENT**

PRACTICE	Regularly assess all costs involved in delivering cervical cancer prevention services through a combination of service delivery channels.	
OBSERVED RESULTS	<ul> <li>Improved capacity to respond to changes in the context</li> <li>Improved sustainability of services, particularly for vulnerable populations</li> </ul>	
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Develop an annual budget that estimates costs and expected revenue/losses using data from the supply management, finance and human resources teams, as well as projections for services per intervention area.</li> <li>Update the information regularly and as changes occur (e.g. changes in supply costs, increase in the number of beneficiaries, etc.)</li> <li>Identify areas where losses/resource waste can be avoided (e.g. assess potential partnerships in a specific geographical area to minimize costs and increase access).</li> </ol>	

#### **IMPLEMENT DAUGHTER-TO-MOTHER STRATEGIES**

PRACTICE	Implement home visits to deliver cervical cancer prevention messages and connect women with screening and treatment services.		
OBSERVED RESULTS	<ul> <li>Improved knowledge among women about cervical cancer prevention</li> <li>Increased number of women accessing cervical cancer prevention and SRH services</li> <li>Increased perception of privacy among targeted women (mothers)</li> <li>Perception of improved mother-daughter communication among participants</li> <li>Increased youth participation in promoting access to SRH services (including access to HPV vaccination) and SRH and rights</li> </ul>		
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Recruit young girls willing to participate in the strategy.</li> <li>Provide sensitization and training on cervical cancer prevention.</li> <li>Develop and share a set of key messages for young girls to share with their mothers.</li> <li>Prepare young girls to overcome potential communication challenges (e.g. how to initiate the dialogue, parental authority management, etc.)</li> <li>Monitor the implementation of the strategy and its impact on increasing access to services by women in the priority age group.</li> <li>Engage young girls in other SRH and rights activities.</li> </ol>		

#### **REACH ELIGIBLE WOMEN THROUGH HOME VISITS**

PRACTICE	Engage young women (e.g. identified in school settings, from peer educators) to deliver messages to their mothers/relatives on cervical cancer prevention and access to services.		
OBSERVED RESULTS	<ul> <li>Improved knowledge among women about cervical cancer prevention</li> <li>Increased number of women accessing cervical cancer prevention and SRH services</li> <li>Increased perception of privacy among targeted women</li> <li>Increased number of women who return to the services for their results (multiple visit approach), as home visits offer opportunities to explain the importance of follow-up services more in depth</li> </ul>		
RECOMMENDED STEPS FOR IMPLEMENTATION	<ol> <li>Use data (or local knowledge) to establish a map of homes to be visited/dates.</li> <li>Establish a pool of trained providers to implement the home visits.</li> <li>Develop culturally sensitive key messages, IEC materials to deliver during the visits, and ensure availability of referral forms.</li> <li>If possible, organize general awareness-raising activities for community members to gain individuals' trust.</li> <li>Implement visits and refer women to services, as needed.</li> </ol>		

# Want to know more? Recommended resources

PROTOCOLS, GUIDELINES AND JOB AIDS	<ul> <li>Comprehensive cervical cancer control, 2nd edition: <u>http://www.who.int/reproductivehealth/topics/cancers/en/</u></li> <li>WHO Guidelines for Screening and Treatment of Precancerous Lesions for Cervical Cancer Prevention: <u>http://www.who.int/reproductivehealth/publications/cancers/screening_and_treatment_of_precancerous_lesions/en/</u></li> <li>Use of cryotherapy for cervical intraepithelial neoplasia: <u>http://www.who.int/reproductivehealth/publications/cancers/9789241502856/en/</u></li> <li>Cryosurgical equipment for the treatment of precancerous cervical lesions and prevention of cervical cancer, WHO technical specifications: <u>http://www.who.int/reproductivehealth/publications/cancers/9789241504560/en/</u></li> <li>PAHO/WHO. Monitoring national cervical cancer prevention and control programmes: Quality control and quality assurance for visual inspection with acetic acid (VIA)-based programmes. <u>https://www.paho.org/hq/index.php?option=com_docman&amp;task=doc_do_wnload&amp;gid=22199&amp;Itemid=270&amp;Iang=en '</u></li> </ul>	
QUALITY ASSURANCE TOOLS		
PROGRAMMING TOOLS	<ul> <li>Comprehensive Cervical Cancer Prevention and Control: Programme Guidance for Countries'<u>http://www.unfpa.org/webdav/site/global/shared/ENGLISH-</u><u>%20Cervical%20Cancer%20Guidance.pdf</u></li> <li>Planning and Implementing Cervical Cancer Prevention and Control Programs: A Manual for Managers'<u>http://www.path.org/publications/files/RH_accp_mfm.pdf</u></li> </ul>	
TRAINING TOOLS	<ul> <li>CCSPT Training Package: <u>https://www.dropbox.com/s/6ljj449jc3rrejs/CCP%20Training%20Package%20Mar%202014.zip?dl=0</u></li> <li>Course in Visual Methods for Cervical Cancer Screening: Visual Inspection with Acetic Acid and Lugol's Iodine'<u>http://www.rho.org/files/PATH_VIA_curric_I-V_for_web.pdf</u></li> </ul>	

#### Annexes Annex 1. Poster example for adaptation

## YOU CAN PREVENT CERVICAL CANCER!

**THE FACTS:** Cervical cancer develops in a woman's cervix. The main cause of cervical cancer is HPV, which is the most common sexually acquired infection.



#### IT ONLY TAKES MINUTES TO SAVE YOUR LIFE!



Women aged 30-49 can prevent cervical cancer by accessing screening and treatment. A screening test helps to find out if a woman is at risk! Women with precancerous lesions will receive treatment.

Male and female condoms help reduce HPV transmission.



Young girls and boys up to 14 years old can prevent cervical cancer by accessing HPV vaccines in our clinics. HPV vaccines are effective and safe!

ACT NOW! WANT TO KNOW MORE? We can help you to prevent cervical cancer. Ask our providers or call **123 456 789** www.website.com



Annex 2. Brochure example for adaptation



#### Dear you,

We're so happy to see you! The fact that you're here today shows that you definitely value and care about your health. That's why we're excited to share some information about certain health issues that we think you should know about. Remember, we're here to support you and help you lead a happy and healthy life, so we'd like to help you understand and prevent these issues. Alright, let's get started. Have you heard about cervical cancer? Maybe you have, but you're not exactly sure what it is. Well, cervical cancer is a cancer that develops in a woman's cervix, which is the lower part of the uterus. Its main cause is the human papillomavirus (HPV), which is the most common viral infection transmitted through sexual contact. If you are sexually active, you are at risk of getting HPV, even if you're only had sex with one person. If you're a smoker or if your immune system is weakened (for example, if you're a woman living with HIV), you're at especially high risk for HPV.

But don't Freak out! Maybe you already know that an HPV infection doesn't usually cause serious harm or have any noticeable symptoms, and it generally goes away on its own, without medical treatment. However, in some cases, the HPV infection doesn't go away, and the virus can lead to precancerous lesions or even cervical cancer.

But darling, the good news is...cervical cancer is totally preventable! Yes, it is! And you and your family can take steps to prevent cervical cancer early! For example, if you have a son or a daughter, they can both access the HPV vaccine before they become sexually active. This safe and effective vaccine prevents transmission of the HPV virus and has been used worldwide for many years.

We want you to feel good and be healthy, so we also want to let you know that using female and male condoms can help reduce HPV transmission. Pretty amazing, right?

In addition to the HPV vaccine, you can also prevent cervical cancer later in life by accessing screening and treatment services right here at our clinic. A screening test is a way to find out if you are at risk for cervical cancer. There are different screening methods. However, the most important thing you should know is that each of these methods is quick, easy, and helps save lives!

If you decide to access screening services with us, we may find that you don't have anything to worry about. That's great! Just make sure you remember to come back and visit us again for regular screening, just in case. If we do find a pre-cancerous lesion, don't freak out! We can treat them! Just remember that treatment must happen as soon as possible before lesions progress into cervical cancer. Darling, sometimes the screening reveals that you're likely to have developed cervical cancer. If this happens to you, don't panic! This isn't a death sentence. Instead, it's a great opportunity to prevent cervical cancer from developing further. Remember, cervical cancer is highly treatable if it is diagnosed at an early stage. We want you to know that there are lots of treatment options.

Well dear, now that you know the basics about cervical cancer, maybe you'd like some more information. And we're definitely happy to provide it-just contact us at XXXXXXX.

Accurate information can save lives. So, keep loving life by sharing this information with the people you care about. Spread the word! Let's work together to prevent cervical cancer and help you, and women like you, live happy and healthy lives!

We hope you have a truly wonderful day.

With care and affection,

Us

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#### Annex 3. Referral forms for adaptation

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B1b: (	Client Referral Form for Cryotherapy
	Country:
	Site:
	Client Information:
	Unique Client Number:
	Last Name(s): First Name(s):
	Age:
	Village/Traditional Authority/Town: District:
	Town:
	Address Details:
	Phone:
1	Date of initial visit (dd/mm/yyyy):
2	Please fill-in referral facility information:
	Name:
	Address details:
	Phone:
	Contact person:
VIA F	NDINGS: For use by referral provider
3	Date client presented for care (dd/mm/yyyy):
4	Draw the squamocolumunar junction and any lesions seen with VIA:
5	VIA findings: (1. Negative, 2. Positive, 3. Suspicious for cancer (SFC))

6	If VIA is positive, is the client eligible for cryotherapy? (1. Yes, 2. No)
7	Was cryotherapy done?: (1. Yes, 2. No) (If yes, please fill-in date DD/MM/YYYY) If no, please complete questions 6 and 7
8	Primary reason cryotherapy was not done: 1. Client refused - Reason given 2. Client decided to postpone - Reason given 3. Dense white lesion at least 2 mm larger than the probe or lesion extending into vaginal wall 4. Lesion extends more than 2 mm into endocervix 5. SFC 6. Client is more than 20 weeks pregnant 7. Other (Specify)
9	If cryotherapy was not done, what is the plan of action for the client? 1. Advised to come back and given appointment 2. Given treatment for sexually transmitted infections and given appointment 3. Referred for further evaluation

#### Annex 4. Quality assurance tool for adaptation

QUALITY OF CARE STANDARDS FOR CERVICAL CANCER SCREENING AND PREVENTIVE THERAPY – CCSPT PROJECT	<b>N/A</b> (mark with an X)	Standard not in place (mark with an X)
I. INFRASTRUCTURE		
Demedicalization is evident – the client feels comfortable and there is respect for privacy and confidentiality.		
The set-up of the clinic/centre has a pre-procedure, procedure, post-procedure area for client care and space for instrument processing. The unit has all the necessary furniture and supplies and has suitable client flow.		
CCSPT services are clearly advertised in the facility.		
II. HUMAN RESOURCES		
Adequate numbers of providers are trained on CCSPT (adequate should be assessed based on the current demand for services. When there is an adequate number of providers, clients should not have to wait for long periods of time to access the service or get an appointment).		
Admin staff is aware of the availability of VIA and cryotherapy at the facility.		
Adequate numbers of staff are trained to maintain equipment, including preventing infection and assembling/dissembling the cryo unit.		
III. COUNSELLING AND PRE-VIA		
A comprehensive history is taken to establish eligibility for cervical screening.		
Family planning and HIV/STI screening are discussed.		
Counselling, confidentially and consent are emphasized. The information is explained in detail in a non-threatening manner and in language the woman understands.		
Privacy and comfort for the client are emphasized. Clients are covered and not completely exposed before and during the procedure, and only those personnel needed in the procedure room are present.		
The procedure bed faces away from the door, and doors to the procedure room are closed. No one enters the room until the procedure is finished.		
IV. VIA		
Instruments are complete and ready for use and are covered until the time of use (based on the list provided in the protocol).		
Complete the relevant general examination, including a pelvic examination with the opportunity to exclude abnormalities like STIs, evident malignancies or other conditions.		
Gently insert the speculum to view the cervix clearly.		
Apply 3-5% acetic acid to the cervix for one minute.		
Discuss the results with the client before moving to the next stage of CCSPT service.		

Wipe the light source with 0.5% chlorine solution or alcohol to avoid cross contamination and wipe down the table after the client has left.	
Fully submerge speculum and forceps are fully submerged in 0.5% chlorine for 10 minutes.	
Clean instruments with a brush and soapy water, rinse and dry.	
Process instruments for the next use (sterilization/high-level disinfection).	
V. CRYOTHERAPY	
Provide information on cryotherapy and obtain consent.	
Repeat VIA to identify lesion.	
Check gas tank pressure before the treatment to ensure that it is sufficient (as per manufacturing guidelines).	
Apply the cryotip to the cervix, ensuring that the nipple is centred on and placed securely on the cervical os.	
When freezing, squeeze trigger until it latches with no continuous pressure on trigger.	
Hold the cryoprobe perpendicular to the plane of the cervix. Ensure that neither the cryoprobe or cryotip touches the vagina. Use a plastic sheath to protect the probe, or place a wooden tongue/spatula between the probe and the vaginal walls.	
Perform double freeze cryotherapy. Freeze for three (3) minutes. Do not remove tip while cervix thaws and refreeze for five (5) minutes.	
Inspect cervix to ensure that a hard, white frozen ice ball is present.	
Remove probe from cervix and wait for cryotip to detach.	
Inspect cervix for bleeding and, if needed, apply pressure with clean cotton swab. Dispose of swab.	
Close gas valve post treatment.	
VI. POST-CRYOTHERAPY	
Provide post treatment and follow-up information to client	
Check if the client is experiencing excessive cramping. If she is and it doesn't subside in 10 minutes, give her an oral analgesic.	
Observe the client for at least 15 minutes.	
End the procedure smoothly, including cleaning the cervix and vagina and making sure there is no ongoing bleeding, gently removing the speculum and cleaning the vulva, if needed. Provide the client with a sanitary pad and cover her. Support the client and transfer her to the post-procedure area.	
Decontamination: All used instruments are disassembled and immersed fully in decontamination solution (0.5% chlorine solution). Process the cryotip as per manufacturing instructions.	
Decontaminate cryotherapy unit, hose and regulator by wiping with 70-90% alcohol.	
Desumant findings	

Discharge instructions are provided, including oral and written discharge instructions and details on danger signs that require immediate care.		
VII. EQUIPMENT AND SUPPLIES		
Light source (ideally a headlamp)		
Instrument tray		
Bivalve specula of different sizes		
Cotton swabs or cotton wool held by forceps		
Diluted acetic acid solution (3% to 5%)		
Chlorine solution (0.5%)		
Timer		
Examination gloves		
Wooden spatula		
Cryotherapy equipment		
Functioning regulator with pressure gauge		
Flexible hose connecting the regulator to the cryogun		
Functional handle, trigger and probe		
Metal cryotip designed to fit up against the cervix		
The cryotip remains attached to the cryoprobe shaft to prevent water from entering the inside cavity Inspect rings and washers whenever cylinder is changed.		
Defrost cryo machine and clear with probe of compressed gas.		
Keep machine in secure place with cryotip covered.		
Ensure that there is adequate gas pressure in the cylinder as per manufacturing instructions after the cylinder is opened to release the gas.		
Use cylinder trolleys for gas tanks with secure upright storage.		
Net total score (= number of cells with an "x" for each column)		
Number of standards assessed (= total number of standards – total number of "N/A" standards)		
Divide net total score by number of standards assessed		
CCSPT: Comments		

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