The United Republic of Tanzania

Ministry of Health and Social Welfare

# National Cervical Cancer Prevention and Control Strategic Plan

## 2011 - 2015

Reproductive and Child Health Section
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# Acronyms and Abbreviations

| | |
|---|---|
| ACCP | Alliance for Cervical Cancer Prevention |
| ADs | Auto-Disable Syringes |
| AEFI | Adverse Events Following Immunization |
| AGOTA | Association of Gynecologists and Obstetricians of Tanzania |
| AIDS | Acquired Immunodeficiency Syndrome |
| AMREF | African Medical and Research Foundation |
| ASR | Age Standardized Incidence Rate |
| CBO | Church Based Organization |
| CCHP | Council Comprehensive Health Plans |
| CHMT | Council Health Management Team |
| CIN | Cervical Intra-Epithelial Neoplasia |
| CMS | Central Medical Stores |
| DHMT | District Health Management Team |
| DMO | District Medical Officer |
| DTP | Diphtheria, Pertussis, Tetanus, Hepatitis B and *Haemophilus influenzae* b |
| EPI | Expanded Programme on Immunization |
| FBO | Faith Based Organizations |
| GAVI | Global Alliance on Vaccines and Immunization |
| GoT | Government of Tanzania |
| DPG | Development Partners Group for Health |
| HepB | Hepatitis B |
| Hib | *Haemophilus Influenzae* type b |
| HIV | Human immunodeficiency Virus |
| HPV | Human Immunodeficiency Virus |
| HPV DNA | Human Papillomavirus Virus Deoxyribonucleic Acid |
| HMIS | Health Management Information System |
| HSSP | Health Sector Strategic Plan |
| ICAP | International Centre for AIDS Control and Treatment Programs |
| ICC | Interagency Coordinating Committee |
| IEAE | International Atomic Energy Agency |
| IEC | Information, Education and Communication |
| KCMC | Kilimanjaro Christian Medical College |
| LEEP | Loop electrosurgical excision procedure |
| LGA | Local Government Administration |
| MAT | Medical Association of Tanzania |
| MEWATA | Medical Womens Association of Tanzania |
| MOEVT | Ministry of Education and Vocational Training |
| MTEF | Mid Term Expenditure Framework |
| MOHSW | Ministry of Health and Social Welfare |
| MNH | Muhimbili National Hospital |
| MSD | Medical Stores Department |

| | |
|---|---|
| MUHAS | Muhimbili University of Health and Allied Sciences |
| NACP | National AIDS Control Program |
| NCCPC | National Cervical Cancer Prevention and Control |
| NPERCHI | National Package of Essential Reproductive and Child Health Interventions |
| NGO | Non Governmental Organization |
| ORCI | Ocean Roads Cancer Institute |
| PACT | Program for Cancer Therapy |
| PLHIV | People Living with HIV |
| PLWHA | People Living with HIV/AIDS |
| RCH | Reproductive Child Health |
| RHMT | Regional Health Management Team |
| TOT | Training of Trainers |
| TPHA | Tanzania Public Health Association |
| UNAIDS | United Nations Joint Program on HIV and AIDS |
| UICC | Union of International Cancer Control |
| UNICEF | United Nations Children's Fund |
| VIA | Visual inspection with acetic acid |
| VILI | Visual inspection with Lugol's iodine |
| VMA | Vaccine Management Assessment |
| VPD | Vaccine Preventable Diseases |
| VVM | Vaccine Vial Monitor |
| WHO | World Health Organization |
| YFS | Youth Friendly Services |

## Foreword

Cervical cancer is the most common cancer in Tanzania, and is the leading cause of cancer related morbidity and mortality in women in the country. In 2009, cervical cancer accounted for more than a third of all cancer patients seen at the ORCI, the only specialized facility for cancer management in the country (ORCI, 2009). Furthermore, the vast majority of cervical cancer patients are usually seen only at a late stage of evolution of the disease, which reduces considerably the chances of survival.

The problem is compounded by the HIV/AIDS epidemic in sub-Saharan Africa, which equally affects Tanzania. Being HIV positive, increases the risk of developing cervical cancer, by at least 50%. In addition, HIV-positive women in Tanzania, also develop cervical cancer 10 years earlier than HIV-negative women (Kahesa 2008). With an HIV prevalence rate of 6.8% in 2007 being women aged 15–49, has significant implication for any public health intervention, attempting to address the burden of cervical cancer.

The links between cervical cancer and Human Papillomavirus (HPV) infections have been well established. With the existence of new and highly efficacious vaccines against HPV, and the existence of effective screening methods for early detection, cervical cancer could practically be eliminated, if the right strategic approaches were developed and implemented. In addition, early detection and treatment of precancerous lesions coupled with early treatment of cervical cancer, increases the chances for complete cure.

Developing and implementing a national cervical cancer prevention and control strategy, will be a major challenge for Tanzania. These challenges include limited finances, and shortages of trained staff, as well as, limited human and material resources to procure the new vaccine and screening tests, train and deploy the necessary staff, as well as strengthening the health infrastructure to screen, diagnose, and treat cervical cancer patients. However, over the last 2 years, the highest political leaders in the country have expressed a strong desire to tackle the issue. Strong partnerships with international organizations, non-governmental organizations and the private sector, offer a great opportunity to develop and undertake the implementation of a comprehensive national cervical cancer prevention and control (NCCPC) program.

Several initiatives to address cervical cancer prevention, care and treatment, have started in Tanzania, over the last several years. These initiatives are still scattered and need to be consolidated in a National Implementation Plan. They will serve as building blocks, to expand screening services, vaccination, care and treatment to the whole country.

The strategic plan has been developed with the participation of many partners, including government services, international organizations, non-government organizations working in Tanzania and private partners. Development of this plan is in line with the Health Sector Policv 2007. MMAM and HSSP 3.

The plan strategically has been built around three pillars:

- Primary prevention, including behaviour change and vaccination of adolescent girls before they become sexually active. Tanzania has opted to vaccinate girls in Primary School Standard 4.
- Screening of women aged 30 to 49 years and treatment of HPV and the precancerous lesions
- Diagnosis, care and treatment including palliative care for cervical cancer patients

These three pillars will be supported by

- A foundation of a strong health system
- An Information, Education and Social Mobilization strategy
- A monitoring and evaluation plan

An advocacy and social mobilization campaign to build support for the program, has already started, led by the President of Tanzania. MEWATA will be a major stakeholder on this aspect of the program. The Ministry of Health and Social Welfare is aware of the challenges, but existing opportunities, strong political will, and effective partnerships will help to overcome these challenges.

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**Acknowledgment**

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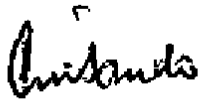

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# Chapter 1. Background information

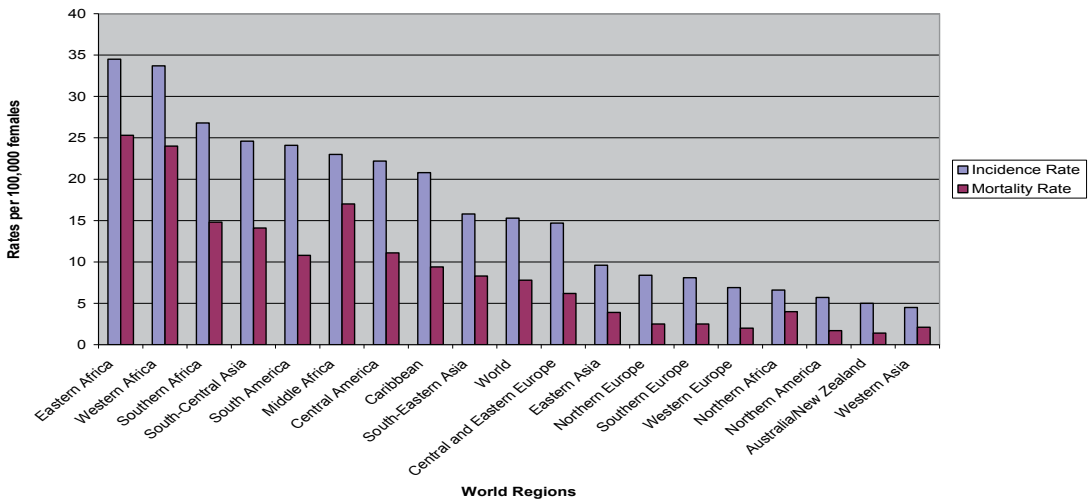
## 1.1. Global Epidemiology of Cervical Cancer

Cervical cancer continues to be among the leading devastating causes of death among women in the world, and more so in Sub-Saharan Africa. Most recent estimates released in 2010 by WHO International Agency for Research on Cancer (IARC) suggest that each year there are more than a quarter of a million deaths from cervical cancer and over 530,000 new cases, most of which could be prevented (REF). The World Health Organization (WHO) projects that without immediate action the global number of deaths from this disease will increase by nearly 80% by 2030, mostly in low- and middle-income countries. More than 85% of the global burden of cervical cancer occurs in developing countries, where it accounts for 13% of all female cancers. WHO projects cervical cancer deaths will rise to 320,000 in 2015 and 435,000 in 2030. (WHO 2007).

> *Cervical cancer is the third most common cancer in women, and the seventh overall, with an estimated 530 000 new cases in 2008. High-risk regions are Eastern and Western Africa (ASR greater then 30 per 100,000), Cervical cancer remains the most common cancer in women only in Eastern Africa, South-Central Asia and Melanesia. Overall, the mortality: incidence ratio is 52%, and cervical cancer is responsible for 275 000 deaths in 2008, about 88% of which occur in developing countries: 53 000 in Africa, 31 700 in Latin America and the Caribbean, and 159 800 in Asia.*
>
> *- GLOBOCAN 2008 Cancer Fact Sheets:*

According to Globocan, Sub Saharan Africa is a home to the more than a 20% of a million women who die annually from cervical cancer, with highest burden in the Eastern Africa region (fig 1). On the occasion of World Cancer Day, the IARC, the Cervical Cancer Action (CCA) coalition and the Union of International Cancer Control (UICC) called for the implementation of comprehensive strategies to reduce cervical cancer. Research indicates that 96 to 99% of cases of invasive cervical cancer are associated with HPV infection.

**Fig. 1 World Age-Standardized Incidence and Mortality Rates per 100,000 Population, Females, World Regions**



### 1.2. Human papillomaviruses and Cancers

either through genital-genital contacts; manual-genital or oral-genital. Condom use may help to reduce the risk, but is not fully protective as other genital areas may not be well covered by condom. Non-sexual routes of HPV transmission which are quite rare include mother to newborn transmission (vertical transmission)[1]. Some researches also suggest that genital HPV can be transmitted through nonsexual routes, via fomites - inanimate objects such as towels or underwear - but more research is needed (Carson, 1997; Keller, et al., 1995; Stevens-Simon, et al., 2000)..

Following the natural history of HPV Infection, large majority of high risk HPV infections (70-90%) would clear within one to two years of the onset of the infection. Persistent infection with a high risk type of HPV is crucial for the development of pre-cancer and cancer of the cervix. There is currently no antiviral available to treat the underlying HPV infection. Within a few months to five years of initial infection the continuing infection can lead to cervical intra-epithelial neoplasia (CIN stage 1, 2 or 3), which in 3 to 5% of cases will develop into an invasive cervical cancer. CIN is also termed as pre-invasive disease. It usually takes 10-20 years for invasive cancer to develop; this means that cervical cancer control is possible through screening and treatment of pre-invasive conditions (WHO, 2006).

***Risk factors for HPV infection by gender[REF]***

*Women*

- *Young age (20-24 years of age)*
- *Number of sex partners*
- *Early age of first sexual intercourse*
- *Male partner with multiple sexual partners*
- *Smoking*
- *Oral contraceptive use*
- *Uncircumcised male partners*

*Men*

- *Young age (25-29 years of age)*
- *Number of sex partners*
- *Being uncircumcised*

### 1.3. Comprehensive Cervical Cancer Prevention and Control

According to WHO, there are four basic components of cervical cancer control, which encompasses primary prevention, early detection through increased awareness and organized cervical cancer screening programmes; diagnosis and treatment; and palliative care for advanced disease. **Primary prevention** encompasses prevention of HPV infection and cofactors that are known to increase the risk of one developing cervical cancer. This includes mass education and awareness-raising addressing high-risk sexual behaviours as well as discouraging use of tobacco and smoking. Primary prevention is more effective with use of HPV vaccine. HPV vaccines have recently been added to primary prevention strategies. Currently WHO encourages introduction of HPV vaccines in low-resource settings to be integrated in national immunization programs. Two major types of vaccine are now recommended i.e. Gardasil® a quadrivalent vaccine against HPV genotypes 6, 11, 16 and 18 and Cervarix® a bivalent vaccine against genotypes 16 and 18.

**Early detection** refers to well-organized cervical cancer screening programmes and intervention targeting specified age groups. At least three major cervical methods are

[1] Smith EM, Ritchie JM, Yankowitz J et al. Sex Transm Dis. 2004; 31:57-62

globally accepted that includes a conventional cytological method by Pap smear; HPV DNA testing; and Visual inspection methods using acetic acid (VIA) and Lugol's iodine (VILI). Effective screening it involves training of a range of cadres of health care providers and also the targeted girls and women and their significant others. **Diagnosis and treatment** are integral part of any screening method. Treatment of precancerous lesion can be done on a single visit using relatively simple procedures that prevent progression to cancer. Treatment that can be offered within a screening setting includes cryotherapy, cold coagulation or electrosurgical excision procedure (LEEP) depending on the size and site of the pre-cancerous lesion.

Early detection and treatment of precancerous lesions are also referred to as **secondary prevention**. Treatment of invasive cancer that includes radical surgeries, radiotherapy and chemotherapy are considered **tertiary prevention** together with palliative care. **Palliative care** is an essential component in a comprehensive cervical cancer control programme targeting women with advanced disease aiming at symptomatic relief to control bleeding, pains and side effects due to treatments. Palliative care provides compassionate care to patients and their caregivers.

All four components are crucial for a comprehensive intervention for prevention and control of cervical cancer in Tanzania. The country needs to adopt cost-effective models warranting wider access with meager resources.

# Chapter 2: Situation analysis

### 2.1 Country Profile

Tanzania Mainland has 21 regions and 124 districts. Each district is divided into divisions, which in turn are composed of 3-4 wards (5-7 villages for a ward). The district is the most important administrative and implementation unit for public services. The Ministry of Health and Social Welfare in collaboration with the Prime Minister's Office Regional and Local Government are strengthening district health services.

Tanzania Mainland has an estimated 2011 population of 43,169,305 projected from the 2002 population census. It has an annual population growth rate of 3.1%. Crude birth rate is 41.6 per 1,000 population and life expectancy is 53 years for men and 55 years for women. Twenty five percent of the population resides in the urban areas and the seventy five percent of the population is rural.

### 2.2 Burden of cervical cancer in Tanzania

Cervical cancer is the leading cause of cancer related morbidity and mortality in women in Tanzania. Tanzania suffers one of the highest cervical cancer burdens in the world and the highest in Eastern Africa, with an age-standardized incidence rate (ASR) of 50.9 cases per 100,000 women, and an age-standardized mortality rate of 37.5 per 100,000 women. One-tenth of the estimated 72 000 new cases and 56 000 cervical cancer deaths in Sub-Saharan African countries in the year 2000 occurred in Tanzania. In 2009 cervical cancer accounted for 35.3% of all cancer patients seen at the Ocean Road Cancer Institute (ORCI), the only specialized facility for cancer management in the country (ORCI, 2009). Furthermore, 80% of patients diagnosed with cervical cancer die within 5 years of diagnosis. This low survival is mainly due to advanced stage of disease at presentation and limited access to cervical cancer screening, diagnosis and treatment services.

The problem is compounded by the HIV and AIDS epidemic. The association between HIV and invasive cervical cancer is complex with several studies now clearly demonstrating an increased risk of precancerous cervical lesions and more rapid progression to cancer among HIV-infected women. In Tanzania women with cervical cancer are twice as likely to be HIV-positive and HIV-positive women also develop cervical cancer 10 years earlier than HIV-negative women (Kahesa 2008). With an HIV prevalence rate of 6.8% among women aged 15–49 as reported in THMIS 2008 brings significant implications for national programs (UNAIDS 2008).

Despite the high burden of disease, the majority of women do not have access to cervical cancer prevention services in the country. Implementation of a national cytology based screening program would be challenging due to the resources required. Tanzania lacks adequate histopathology and other diagnostic and treatment facilities.

Yet, opportunities do exist to prevent treat and cure this suffering by promoting primary prevention, secondary prevention and tertiary care. A comprehensive approach to prevention, including vaccination, screening and treatment will lead to reduction in the incidence and the mortality rate from this preventable disease. Early detection of precancerous lesions coupled with early treatment of cervical cancer increases chances for complete cure. Integrating cervical cancer and HIV intervention is an approach appropriate for Tanzanian setting

**2.3 Existing Initiatives to Prevent and Control Cervical Cancer in Tanzania**

**Policy Environment**

The 2005 – 2020 Reproductive and Child Health Strategy describes the National Package of Essential Reproductive and Child Health Interventions (NPERCHI) and outlines the most feasible, efficient and effective methods to reduce the leading causes of morbidity and mortality. Prevention and management of cancer is one of the components of NPERCHI.

Several national disease control strategy documents have been developed including a Primary Health Care Strategy, a Non-Communicable Disease Strategy and a National Strategy for Growth and Poverty Reduction. A draft National Cancer Control Strategy was prepared in 2008 with support from International Atomic Energy Agency (IAEA) through its program for cancer therapy (PACT) and the Tanzania National Steering committee for National Cancer Control Strategy. The strategy clearly outlines the need for a cervical cancer prevention and control program in the country. In addition, the National Non-Communicable Disease Strategy identified cervical cancer as one of the four cancers that need immediate prevention and control in the country.

Ocean Road Cancer Institute was established in 1996 with the mandate of providing services related to cancer diagnosis and treatment, prevention, research and teaching. ORCI is the only specialized centre for cancer care in Tanzania. Treatment and palliative care are provided at no cost to the patient. The Government of Tanzania is responsible for all cost related to cancer diagnostic, treatment and care.

**Prevention Services**

Early detection and prevention of cervical cancer can reduce morbidity and mortality due to cervical cancer. Cervical cancer prevention services started in 2002 with ORCI spearheading the efforts by establishing a cervical cancer screening and treatment program for health care workers in various regions using Visual Inspection technique with application of acetic acid (VIA).

In response to increased demand for cervical cancer screening services, the Reproductive Health Cancer Unit was established within the Ministry of Health in

2008. Following a number of consultations with stakeholders, the MOHSW through the Reproductive Health Cancer Unit developed a Cervical Cancer Prevention and Control Strategy that provides a background for the development of a National Strategic Plan. In addition, in May 2010 the unit produced the Cervical Cancer Prevention Service Delivery Guidelines. Strategically the MOHSW has:

- Obtained commitment from stakeholders and partners to support development and implementation of an organized cervical cancer prevention program, including both vaccination of adolescent girls and screening/ treatment of adult women
- Conducted a preliminary rapid assessment of cervical cancer prevention program including cost analysis
- Established a Technical Advisory Group (TAG) and sub working groups for cervical cancer

**Cervical Cancer Screening Services**

Tanzania has limited and relatively uncoordinated cervical cancer screening and treatment services. Currently cervical cancer screening services are routinely available in Dar es Salaam (ORCI, MNH, few Private Hospitals). Until 2010, training had been provided in the following regions and services are increasing, often with the support of NGOs: Morogoro (3 health facilities), Kigoma (12 health facilities), Kilimanjaro (8 health facilities), Ruvuma (7 health facilities), Dodoma (3 health facilities), Lindi (1 health facility), Mtwara (2 health facilities), Iringa (1 health facility), Manyara (2 health facilities), Bagamoyo (1 health facility), Tanga (1 health facility), Muheza (1 health facility) and in Mwanza (4 health facilities) and Arusha (3 facilities). With exclusion of Muhimbili National Hospital and few Private Hospitals, the existing sites are providing screening services using visual inspection technique after application of acetic acid (VIA) linked with cryotherapy, cold coagulation or LEEP treatment approaches when indicated. Women accessing these services include those attending health facilities for other services at reproductive and child health (RCH) clinics, but also women mobilized from the community. MOHSW is moving towards introduction of HPV DNA testing into selected pilot sites.

ORCI collects data from 11 sites. The total number of women screened at these sites to the end of 2009 was 21,347. Screening results showed that 17,868 (85%) were VIA negative, 2,577 (12%) were VIA positive and 558 (3%) were suspicious for cancer. There are no data regarding follow up of cases requiring referral.

**Initiatives to improve screening and treatment**

VIA screening initiatives for cervical cancer in Tanzania have largely been undertaken by ORCI since 2002, whereby the service mostly benefited women in Dar es Salaam. Since 2006, ORCI expanded services by training health care workers in regional hospitals and clinics. In addition, WHO through its multicentre VIA project assisted in

establishing screening clinics in Peramiho hospital and at Kilimanjaro Christian Medical Centre since 2007; these clinics have managed to scale up the service in their catchment area district hospitals and health centers.

Since 2009 other partners have joined the efforts of establishment of screening clinics including Grounds for Health collaborating with ICAP and Jane Goodall Institute in Kigoma, JHPIEGO in Morogoro and PATH in Geita. Treatment of cervical cancer has been largely done through radiation therapy and chemotherapy provided at ORCI. Because the vast majority of patients are diagnosed at advanced stages of disease, chemo-radiation had been the main stay of treatment for cervical cancer patients, mainly for palliation. The lack of availability of surgical oncologists and the late stage at which cervical cancer patients present are limiting factors for the use of surgical treatment options. Chemo-radiation has shown some favorable results.

**Existing histopathology services**

The diagnosis of cervical cancer requires a histological proven report of the biopsy specimen from the suspected lesion. There are only about 15 pathologists in the country, and most of them are based in Dar es Salaam at MUHAS and MNH. Outside Dar es Salaam, pathology services for cervical cancer diagnosis are provided at Bugando Medical Center, Mbeya Referral Hospital, KCMC and a private laboratory in Dodoma. However, women in remote districts and regions have limited access to diagnostic and treatment services.

**Community awareness**

In the prevention of cervical cancer, community awareness and communication is critical. There is limited knowledge about cervical cancer risk factors. This is due to the limited budget allocated for awareness and education campaign, and lack of appropriate mechanisms for reaching rural areas. Thus, awareness of cervical cancer preventive measures is still low in the community despite the efforts of preventing cervical cancer in the country. ORCI, Medical Women Association of Tanzania (MEWATA), and other professional organizations such as Medical Association of Tanzania (MAT), Tanzania Public Health Association (TPHA), Association of Gynaecologists and Obstetricians in Tanzania (AGOTA) have been working to increase awareness of cervical cancer screening and treatment through interviews and advertisements on televisions, radio stations and newspapers as well as information in brochures, posters, banners etc.

**Immunization services in Tanzania**

HPV vaccination is not currently included in Tanzania routine immunization schedule. The infrastructure and equipment available are well suited for the introduction of HPV vaccine. However ***an expansion of the Temperature Controlled Chain*** will be necessary

to respond to the volume requirements of the new vaccine introduction (especially monodose vials). Acknowledging the increased demand for space to store new vaccines the EPI central vaccine store received two cold rooms of 40m³ each from UNICEF in 2010. Additional cold chain requirements at the national and regional levels have been identified. The Government of Tanzania through MOHSW received support for expanding available infrastructure for vaccine storage at central and regional levels from CIDA in December 2010. A detailed plan for expansion of national and regional storage is being developed by MOHSW, WHO and UNICEF. Additional resources are likely to be required for expansion at the district and health facility level.

### 2.4 Strengths, weaknesses, opportunities and threats

#### Introduction

There is high political will and high level government commitment as demonstrated by the First Lady and H.E. President Jakaya Kikwete of the United Republic of Tanzania who are championing for prevention of cervical cancer for Tanzanian women. The existence of a National Cancer Control Strategy is an indication of this priority in the Government plans.

| STRENGTHS | WEAKNESS | OPPORTUNITIES | THREATS |
|---|---|---|---|
| National Cancer Control Strategy and priority | Lack of adequate human and financial resources | Government willingness and readiness to support cervical cancer control initiatives | Human resource training for the introduction of new vaccines, scaling up screening and treatment services |
| Existing healthcare infrastructure to build on | No National Policy for Cancer Prevention and Control | Commitment by development partners and institutions to support cervical cancer | Different target group for HPV vaccination compared with the routine EPI childhood immunization target groups required<br><br>Different approaches in terms of vaccination strategy, advocacy and behavior adoption |
| Strong immunization program with available infrastructure and staff for new vaccine introduction | Limited availability of cervical cancer diagnosis and treatment facilities | Draft National Cancer Prevention and Control Strategy available | Competing public health priorities |
| Referral system for women diagnosed with cervical cancer | Lack of coordination of the cervical cancer screening and treatment program/services | Existence of a strong Health Education and Health Promotion section with advisory | Budgetary limitation for human resource development |

| | | | |
|---|---|---|---|
| | | committee which oversees IEC interventions in the country | |
| National cancer institute – Ocean Road Cancer Institute | Limited knowledge by the health care providers and the public in general about cervical cancer burden its prevention and control strategies | National School Health Program jointly coordinated by the MOHSW and MOEVT | The system readiness for Cervical Cancer Prevention and Control is still very low |
| Cervical Cancer Service Delivery Guidelines drafted | Absence of an implementation plan for IEC on cancers | Training and research capacity at ORCI that could serve as an anchor for expansion of cervical cancer diagnostic, treatment and care services | Sustainability of vaccination and screening products beyond donation program by Merck and Qiagen |
| Some experience in implementation of cervical cancer control activities and methods such as VIA and cryotherapy and the HPV vaccine demonstration project showing the vaccine can be given in school girls with good coverage for all three doses | Lack of human resource capacity in advocacy for cervical cancers Low health seeking behaviour among adolescent | Establishment of oncology training program at MUHAS/ORCI | Long-term sustainability of resources required to direct and implement the program |
| Existing cervical cancer screening services in various sites | Inadequate temperature controlled chain equipment at central, regional and district levels to meet new vaccine introduction volume requirements | Support of expanding temperature controlled chain by UNICEF and CIDA-Canada | Other public health priorities may divert attention of MOHSW and responsible staff needed to oversee program |
| Available trainers and service providers for cervical cancer screening | Limited capacity to organize and coordinate evaluation of new strategies such as HPV testing for screening | Donation of HPV vaccine by Merck, a private manufacturer for a three year immunization program | |
| Available histopathology services at referral hospitals | Limited treatment services - only one site in country (ORCI) to referral and treat women diagnosed with cancer | Donation of HPV DNA Screening tests products by Qiagen, a private manufacturer | |
| Existence of a strong Health Education and Health Promotion section with advisory committee which oversees IEC interventions in the country | | | |

**5 Rationale for cervical cancer strategic plan**

Tanzania has the highest cervical cancer rates in East Africa and with an estimated age-standardized incidence rate of 68.6 per 100,000 and a mortality rate of 55.6 per 100,000 women (2002 Globocan). Unlike many other cancers, cervical cancer is mostly preventable. Over the past few decades, in the absence of programmatic interventions to prevent cervical cancer, there have been some isolated initiatives to introduce and scale up cervical cancer screening and treatment services. Examples include demonstration sites in Peramiho in Ruvuma, Moshi and Kigoma. Ocean Road Cancer Institute has been the only cancer treatment centre in the country.

While there is a clear indication for establishing a national program to address cervical cancer prevention and control, this plan provides guidance in planning, coordination, implementation, monitoring and evaluation. It seeks to mobilize and ascertain rational distribution and use of resources. The MOHSW calls for all stakeholders and partners to make effective use of this strategic plan for the benefit of all Tanzanian women. This will ensure effective coordination and efficient use of resources, as well as synergy and equity is distribution of efforts for cancer prevention and control measures in the country

Cervical cancer prevention and treatment services are scarce in Tanzania and the majority of women have limited access to services. Eighty percent of patients are seen in the last stages of the disease. With increased awareness there will be an increased demand for services and thus the need to roll out accessible, effective and affordable cervical cancer interventions (including treatment) in all regions in the country.

Tanzanian women experience a wide variety of gender related challenges including social, economical and cultural inequalities and vulnerabilities. Most women who die from cervical cancer are in the prime of their life, may be raising children, caring for their family, and contributing to the social and economic life of their communities. Women have a right to accessible, affordable and effective services for prevention, care and treatment of cervical cancer. This strategic plan addresses gender implications of cervical cancer disease. Sensitizing the communities and raising awareness of HPV and cervical cancer will be critical. Educating boys and men in safe sexual behavior will also be an important part of the strategic plan in order to reduce the risk of HPV transmission.

# Chapter 3: Strategic Framework

This section includes the vision, mission, guiding principles, strategic objectives and a description of key activities.

**Vision** Women free from the burden of cervical cancer in Tanzania

**Mission**

The MOHSW is committed to translate cancer prevention and control knowledge into public health action. by involving all stakeholders including the community at grass root level in a manner that will ensure transparency, quality, availability and accessibility of cervical cancer services.

**Guiding principles of the strategic plan**

In line with the National Road Map Strategic Plan to Accelerate the R**e**duction of Maternal, Newborn and Child Deaths in Tanzania 2008-2015 (One Plan), the Strategic Plan for Cervical Cancer Prevention and Control will abide by the following guiding principles in order to ensure efficiency, effectiveness, ownership and sustainability of the program.

**1. Integration**

All efforts will be made to implement the proposed priority interventions at various levels of health system in a coherent, integrated and effective manner that is responsive to the needs of Tanzanian women.

**2. Evidence based approach**

The NCCPC strategic plan is based on up to date evidence, priority needs and cost effective strategies and approaches. Operational research will be conducted to provide evidence and inform program development.

**3. Equity and accessibility**

A conscious effort will be made to promote equitable access to quality health services with greater attention to women living in rural and underserved areas as well as women living with HIV infection or of unknown HIV status.

**4. Gender in Health**

Mainstreaming gender throughout the program as the basis of planning and implementation is important. All women have a right to accessible, affordable and effective services for prevention, care and treatment of cervical cancer.

**5. Partnership**

The plan will promote partnership and joint programming among stakeholders including the Regional Health authority, District Councils, private sector, academia professional organizations, civil society organizations as well as

communities in order to maximize the impact of available resources, avoid duplications and reduce wastage of scarce resources.

**6. Division of labor for increased synergy**

The MOHSW will make every effort to define clear roles and responsibilities of all players and partners in the implementation, monitoring and evaluation of the activities for increased synergy.

**7. Transparency and accountability**

The MOHSW will put a special emphasis on accountability, stewardship and transparency on the part of the government as well as stakeholders for enhanced sustainability.

**8. Appropriateness and relevance**

Interventions must rely on a clear understanding of the status and local perspective of cervical cancer prevention and control in Tanzania

**9. Complementarities**

The NCCPC builds on existing programs by taking into account the comparative advantage of different stakeholders in the planning, implementation and evaluation of cervical cancer prevention interventions.

**10. Human Rights**

The right to life is a basic human right and adopting a human right approach as the basis of planning and implementation is important

**11. Phased planning and implementation**

The NCCPC will be implemented in a phased approach with timelines that enable learning and re-planning for better results in all components of cervical cancer prevention program. Building and strengthening existing health infrastructure will be a priority.

**The overall Goal:** To reduce cervical cancer incidence, morbidity and mortality in Tanzania

**3.1 Strategies & Themes**

The following four strategies will enhance the achievement of the vision:

- **Advocacy**: While conducting advocacy convincing data are very important. For example data should show very clearly that currently the percentage of the total budgetary allocation to the MOHSW has not reached yet the Abuja recommendations (15% of the total National budget)
- C**apacity building:** The vision will be realized if the implementers are well trained to manage cervical cancer activities. In addition they should have the equipment and supplies to enable them to perform well all planned activities,
- **Behavior change** communication: Messages should be designed to convince the audience the importance of changing their behavior in order to prevent cancer of the cervix ,

- **Fostering partnership:** Partnering with stakeholders for the implementation of the strategic plan will bring about synergy and faster reduction of cancer of the cervix in Tanzania

These strategies shall operate under five main themes as listed

A. Governance and Programme management
B. Policy and Resource mobilization
C. Primary prevention: vaccination and behavioural change
D. Secondary prevention: screening, diagnosis & treatment precancerous lesions
E. Tertiary prevention: diagnosis, care and treatment of cervical cancer patients
F. Monitoring and Evaluation

### 3.2 Theme A. Governance and Programme management

**Goal 1:** To sustain good governance and manage cervical cancer prevention and control at all health facilities

**Strategic objective 1**

Sustained leadership commitment and good governance towards cervical cancer prevention and control interventions at all levels of the health system

**Key Activities:**

- Develop policy documents on cervical cancer as a public health issue impacting on development agenda.
- Conduct leadership awareness campaign on cervical cancer prevention and control including gender issues.
- Include cervical cancer agenda in management review meeting such as Directors' meetings (MOHSW and RCHS), RHMT and CHMT meetings
- Conduct advocacy platforms for addressing leaders at national, regional and district levels

**Strategic objective 2**

The NCCPC sustained cervical cancer prevention and control at all health system levels

**Key Activities:**

- Institute standard operating procedures and quality assurance measures for the interventions in health facilities
- Procure adequate cold chain spare parts and related supplies
- Conduct training on Effective Vaccine Stock Management (EVSM) at all levels

- Review HPV vaccine coverage to identify where girls are being missed particularly tracking coverage for girls not in school
- Expand cold chain distribution and storage capacities at all level

**Strategic objective 3**
The NCCPC programme linked with the EPI and MSD management to get full support for cervical cancer vaccination

**Key Activities:**
- The NCCPC programme manager to coordinate a quarterly meeting to be attended by MSD and EPI managers
- The NCCPC programme manager to coordinate a yearly meeting to inform all stakeholders on the progress of the NCCPC activities in Tanzania

**3.3 Theme B. Policy and Resource Mobilization**
**Goal:** To advocate for development of cervical cancer prevention and treatment enabling policy that will allow its implementation up to the village level

**Strategic objective 1**
Development of cervical cancer prevention and treatment policy advocated at national level

**Key Activities:**
- Build a strong stakeholders coalition to implement advocacy activities at national, regional, district and community levels
- Develop an NCCPC advocacy plan
- Train health workers on communication strategies and ensure local level advocacy
- Implement the advocacy plan at national levels (relevant sections/departments in the MOHSW and across ministries to integrate NCCPC into relevant existing programs)

**Strategic objective 2**
Resources mobilized to ensure successful roll out and future sustainability of the NCCPC

**Key activities**
- Verify five year national costing for establishing national cervical cancer prevention and control to cover HPV vaccination, 'see and treat' screening including HPV screening, treatment and palliative care services
- Advocate at national level (MOFEA, MOHSW, MOCDGC) for allocation of funds to cervical cancer activities
- Advocate Local government to incorporate cervical cancer activities into CCHP

- Local government to mobilize funds for HPV vaccination, cervical cancer screening, treatment and palliative care activities from partners and private sectors working in their respective districts

**3.4 Theme C. Primary Prevention**

**Goal 1:**To conduct mass education and awareness campaigns with the aim of preventing cervical cancer in Tanzania.

**Strategic objective 1:** Mass education and awareness campaigns for prevention of cervical cancer conducted in Tanzania

**Key activities**

- Develop, print and distribute cervical cancer information, education and communication (IEC) materials for both print (newspapers, articles, etc) and electronic media (TV, radio spots, etc)
- Conduct community sensitization meetings including advocacy and social mobilization meetings at all levels

**Goal 2:** To **achieve universal coverage of HPV vaccination amongst adolescent girls by 2017**

**Strategic objective :** Vaccination coverage sustained amongst adolescent girls in and out of schools

**Key activities:**

- Conduct school sensitization campaigns
- Roll out of a three- phase HPV vaccination program for girls in Primary Schools in standard 4: (in 3 regions in 2014/15, in seven additional regions in 2015/16 and Nationwide in 2017)
- Procure auto-disable syringes, needles and safety boxes for immunization activities
- Forecast vaccines and related materials at all levels
- Deploy routine Human Papillomavirus (HPV) Vaccine Coverage Monitoring Tool for dose one, two and three at district, regional and national level
- Explore and model integration of HPV vaccination programme with other school health programmes
- Engage village/ward/street leaders and health committees, parents and religious leaders including madrasat in mobilizing and promote HPV vaccination to all in and out-of schools girls aged 9-13years

**Theme D. Secondary prevention: screening, diagnosis & treatment precancerous lesions**

**Goal :** To increase the number of women aged 30 and above with access to and use appropriate, quality cervical cancer screening and early treatment of precancerous lesions to 50% by 2015

**Strategic objective 1:** Increased the number of women aged 30 and above with access to and use appropriate, quality cervical cancer screening and early treatment of precancerous lesions

**Key Activities:**

- Engage community mobilizers and public education means as well as organizations like MEWATA to encourage women to access cervical cancer screening services
- Introduce cervical cancer screening using VIA with colposcopy across the country and HPV DNA testing in pilot sites
- Avail treatment services for precancerous lesions in using cyotherapy, cold coagulation and LEEP in national/zonal consultants regional and district hospitals Cryotherapy to be introduced at health facility levels
- Adopt/ develop and disseminate comprehensive training package for cervical cancer screening and treatment of precancerous lesions
- Train zonal, regional and district trainers on cervical cancer screening using national training package.
- Orient CHMTs and RHMTs on cervical cancer screening and treatment services to ensure that plans are incorporated into the CCHPs
- Develop/adapt standard job aides and tools for cervical cancer screening service provision
- Conduct regular post training and supportive supervision at all sites
- Provide cervical cancer screening equipment to and establish mechanisms for maintenance
- Establish a referral system for all women who need treatment of precancerous lesions and those with possible invasive cervical cancer

**Strategic objective 2:** Clinical services for cervical cancer screening and treatment of precancerous lesions integrated in other related clinical services in health facilities

**Key Activities:**

- Develop a scale up plan at national, regional and district levels for integrated cervical cancer screening services (RCH,OPD, STI, CTC clinics)
- Establish integrated cervical cancer screening and treatment services to include 'see and treat' approaches at regional and district hospitals and where feasible in lower

health facilities (health centres and dispensaries) and in outreach reproductive health clinics
- Update pre service curricula to address cervical cancer screening and treatment approaches
- Conduct outreach cervical cancer screening and precancerous treatment services using campaigns or organized community-based clinics to promote uptake of the program
- Conduct training for clinicians and nurses to provide cervical cancer screening services and treatment of precancerous lesions
- Procure and distribute cervical cancer screening and treatment equipment to regional, and district health facilities

**Strategic objective 3:**
HPV DNA testing introduced as a screening method into a selected number of VIA screening sites

**Key Activities**:
- Establish a national reference laboratory and core group of country experts for HPV DNA testing and cervical cancer
- Initiate WHO Operational Research plan, designed to pilot and evaluate the feasibility of implementing HPV DNA testing in Tanzania
- Reproductive and Child Health Section: Cancer Unit to develop a plan, activities, and timeline for tasks involved and MOHSW to assign staff/team to manage the plan
- MOHSW to recruit technical partners (as required) to assist with the transfer of HPV testing technology into the country
- Develop cost effectiveness models to assess the potential impact and costing vs existing program

### 3.6 Theme E. Tertiary prevention: diagnosis, care and treatment of cervical cancer patients

**Goal :**
To increase the number of women who have access to and use quality cervical cancer treatment: surgery, radiotherapy and chemotherapy and palliative care services to 50% by 2015

**Strategic Objective 1:**
Safe, acceptable and cost effective quality diagnostic and treatment services for cervical cancer established

**Key Activities**

- Train histopathologists/cytologists in referral hospitals to enable them provide diagnostic services and ensure sustainability.
- Procure equipment (teleradiotherapy and brachytherapy machines) and supplies at diagnostic sites.
- Train and recruit trained/competent cadres in consultant/referral and regional hospitals for cervical cancer management.

**Strategic objective 2:**
Reduction of barriers for referral accelerated for the provision and receipt of quality cervical cancer, diagnosis and treatment.

**Key Activities**

- District councils to develop a system/mechanism to support/assist poor cancer patients for transport costs payment.
- Raise awareness to the communities in health seeking behaviour related to cervical cancer issues
- Provide standard guidelines for referral of patients to all health facilities
- Train health care providers on guidelines for referral of patients to all health facilities

**Strategic objective 3:** Essential components for palliative care are included in the comprehensive cervical cancer control.

**Key Activities:**

- Develop guidelines for prevention and management of symptoms due to advanced cervical cancer lesions for health care providers, carers and family members
- MOHSW to facilitate availability of pain management drugs including opiates at health facilities down to district level as per palliative care guidelines and WHO's analgesic ladder
- MOHSW to ensure palliative care services for cervical cancer patients are well addressed and included in the national palliative care strategy/initiatives
- Work with national palliative care strategy/initiatives to orient all health providers on palliative care drug policy and guidelines and community home based care providers on palliative nursing care
- Develop guidelines for continuum of care for terminally ill cervical cancer patients to access all basic care including physical, psychological, spiritual and emotional care within her reach.

**Theme F: Monitoring and Evaluation**

**Goal:** To monitor and evaluate cervical cancer prevention, control and treatment services at all health facility levels

**Strategic Objectives 1:** Cervical cancer prevention, control and treatment services monitored at all health facility levels

**Key Activities**

- Develop, print and distribute registers and HPV vaccination cards to all implementing levels
- Develop HMIS training package for health care providers, managers and planners; and harmonize it to the monitoring and evaluation training : package.
- Orient health care providers on HMIS data collection, analysis and utilization of data.
- Orient health care providers, supervisors and program planners on the updated HMIS.
- Conduct follow up and supportive supervision of health care providers.

**Strategic Objective 2:**
HMIS updated to include cervical cancer indicators

**Key activities**

- Integrate cervical cancer prevention and control information into national HMIS (MTUHA) reporting tools
- Print and distribute integrated cervical cancer prevention and control information into national HMIS reporting tools.
- Adopt/Adapt monitoring indicators across all service levels (PHC, regional and referral hospitals including ORCI)
- Orient/train data clerks/officers on updated cervical cancer prevention and control information
- Equip health facilities with necessary data capturing tools e.g. computers, paper-based tools
- Monitor the surveillance and response to Adverse Events Following Immunization (AEFI)
- Distribute monitoring form for HIV vaccination to all health facilities
- Conduct Data Quality Self Assessment (DQSA) for HPV vaccination at national, regional district and community levels
- Conduct post introduction HPV evaluation at each phase
- .Review of HPV vaccination performance indicators at each phase

**Strategic objective 3:**
**Operational Research results strengthened**

**Key activities**

- Train regional and District TOTs on Operational Research skills
- Regional and District TOTs to conduct Operational Research on cervical cancer prevention, screening, treatment including palliative care
- Disseminate the findings of Operational Research to all service providers at regional, district and community levels
- Introduce mechanism for assessing quality of services and client satisfaction at all levels (Exit interviews)

# Chapter 4: Implementation plan

**4.1 Introduction**

The goal of this National Cervical Cancer Prevention and Control (NCCPC) Strategic Plan is to improve the synergy between **partners and** Ministry of Health and Social Welfare **(MOHSW) initiatives.** The success of the strategic plan will depend on strong coordination by the MOHSW, the collaboration of other Ministries such as the Ministry of Education and Vocational Training; a genuine collaboration support from international and bilateral agencies and non-governmental organizations.

Each department at the MOHSW at central level will develop annual work plans in line with the fiscal year to implement the strategy. Annual work plans will be funded through the budget within the MTEF. Interventions to be implemented at the district level will be under the Local Government Authorities. The District and Municipal Councils will need to incorporate the cervical cancer prevention and control interventions into their c

Comprehensive Council Health Plans as well as into their Council Management Plans.

Resources mobilized for the implementation of the NCCPC will need to be managed in the spirit of transparency and accountability to ensure efficient use of resources. Stakeholders, including national government agencies, donor agencies and Development Partners Group need to meet their commitments and work in close collaboration.

**4.2 Roles and responsibilities**

**5.2.1 Role of the Ministry of Health and Social Welfare**

**National Level**

- Technical leadership, guidance and advice on the implementation and monitoring of the strategic plan.
- Establishment of advocacy mechanism for the strategy
- Development of a monitoring and evaluation system
- Identification of relevant research areas
- Develop, review and disseminate policies, guidelines and standards
- Undertake joint planning of activities with all key partners
- Mobilize resources and advocate for Cervical Cancer Prevention and Control
- Spearhead multisectoral involvement for cervical cancer Prevention and Control

- Identify and assign MOHSW staff to be responsible for and lead plans and activities

**Zonal Level**

- Dissemination and Implementation of the Strategic plan to Regional Levels
- Training of Supervisors of Immunization, Screening and treatment staff in cervical cancer
- Monitoring and evaluation activities

**Regional Level**

- Dissemination and implementation of the strategic plan to district levels
- Identification and prioritization of measures to prevent and control cervical cancer
- Identification and recruitment of appropriate qualified human resources
- Training and develop capacity of the available human resources in cervical cancer prevention and control
- Technical support to district level for Cervical Cancer Prevention and Control
- Coordination and supervision of district Level health services
- Coordination and supervision of District Hospitals in cervical cancer prevention and control
- Identification and incorporation of relevant cervical cancer prevention and control activities into Comprehensive Council Health Plans
- Ensure cervical cancer prevention and control activities are fully incorporated in the CCHP
- Support districts and ensure resource allocation for addressing cervical cancer prevention and control
- Harmonise priorities of cervical cancer prevention and control with other diseases of public health importance

**District Level**

- Identification and incorporation of relevant cervical cancer prevention and control activities into Comprehensive Council Health Plans
- Ensure that cervical cancer prevention and control activities are well funded (including outreach for vaccinating girls in schools)
- Harmonise priorities of cervical cancer prevention and control with other diseases of public health importance
- Adopt surveillance or information system for understanding the burden of cervical cancer in the district

- Customize priority measures to prevent and control cervical cancer given the resources available at district level
- Identify and recruit appropriate qualified human resources
- Train and develop capacity of the available human resource in cervical cancer prevention and control
- Technical support to lower health facilities in cervical cancer prevention and control activities
- Micro planning and implementation of HPV vaccination activities and budgeting
- Training, coordination and supervision of health workers in vaccination of school girls, screening and education on cervical cancer
- Ordering and re-ordering of HPV vaccines and supplies for the vaccination
- Conduct HPV vaccination activities
- Collate reports from health facilities on immunization activities
- Monitor and organize response to adverse events following immunization
- Screening monitoring: including monitoring of referrals made to cancer treatment centers

**Health Facility Level**

- Develop cervical cancer prevention and control work plans
- Implement strategies – health education, screening, treatment, referrals, vaccination
- Conduct Supportive Supervision to all health facilities implementing cervical cancer interventions
- Monitor implementation progress of planned activities

**Community Level**

- Village health committees to include activities for awareness creation for cervical cancer prevention and control
- Support community mobilization during screening campaigns
- Support follow-up of cancer patients on treatment and/or home based care (palliative care)
- Village Governments and Ward Development Committees to include reporting on cervical cancer patients and deaths occurring in their catchment's areas

### 4.2.2 Role of other Ministries

Ministry of Education: in collaboration with Ministry of Health and Social Welfare

- Schedule visits of health teams to schools for vaccination, identify eligible girls, support visits for vaccine delivery, inspect adverse events
- Provide information, education on cervical cancer screening and HPV vaccination

- Ministry of Finance: Allocate adequate funds to MOHSW that will include cervical cancer programme funding
- Ministry of Community Development Gender and Children in collaboration with the Ministry of Health and Social Welfare and the PMORALG to collaborate in sensitizing and educating community on cervical prevention and control

**Role of Development Partners, International/Private Organizations**

- Participate and compliment government initiatives on cervical cancer prevention and control
- Support Government resource leverage efforts
- Work in synergy with government of Tanzania and international partners to prevent, control and treat cervical cancer
- Develop specific donations programmes for kick-starting HPV vaccination and HPV screening

**Role of Professional and Civil Society Organizations**

- MEWATA: work with community structure to strengthen community participation in cancer prevention and control
  - Provide assistance in training, social mobilization and clinical activities
  - Assist in mobilizing funds, equipment and supplies
- Research, Training Institutes: training, operational research on cervical cancer
  - Assist in organizing operational research activities

# Chapter 5: Monitoring, Evaluation and Research Framework

Monitoring and evaluation activities around cervical cancer prevention and control are currently minimal; consisting of hospital based cancer registry
housed at ORCI, Muhimbili National Hospital (MNH) and Kilimanjaro Christian Medical Centre (KCMC). The information in these registers includes demographic characteristics of patients, clinical staging, treatment modality, and referrals. However, these three registers are not centrally coordinated.

There is limited information on cervical cancer prevention and control interventions. To facilitate monitoring and evaluation of the cervical cancer prevention and control program, a set of agreed and measurable indicators will be used. Routine cervical cancer prevention and control data will be collected at all levels of the health care delivery system including private health facilities.

**Theme F: Monitoring and Evaluation**

**Goal:** To monitor and evaluate cervical cancer prevention, control and treatment services at all health facility levels

**Strategic Objectives 1:** Cervical cancer prevention, control and treatment services monitored at all health facility levels

**Key Activities**

- Develop adapted and tailored HPV registers, print and distribute HPV vaccination cards to all implementing levels
- Avail women cervical cancer screening cards at service delivery points i.e. Cervical cancer screening clinics/units
- Develop HMIS training package for health care providers, managers and planners; and harmonize it to the monitoring and evaluation training package.
- Orient health care providers on HMIS data collection, analysis and utilization of data.
- Orient health care providers, supervisors and program planners on the updated HMIS.
- Conduct follow up and supportive supervision of health care providers.

**Strategic Objective 2:**
HMIS updated to include cervical cancer indicators

**Key activities**

- Integrate cervical cancer prevention and control information into national HMIS (MTUHA) reporting tools
- Print and distribute integrated cervical cancer prevention and control information into national HMIS reporting tools.
- Establish/Adopt/Adapt monitoring indicators for both vaccination and screening/treatment across all service levels (primary health care, regional and referral hospitals including ORCI)
- Equip health facilities with necessary data capturing tools e.g. computers, paper-based tools
- Monitor the surveillance and response to Adverse Events Following Immunization (AEFI).
- Review of HPV vaccination performance indicators at each phase
- Orient/train data clerks/officers on updated cervical cancer prevention and control information
- Distribute monitoring form for HPV vaccination to all health facilities

**Strategic objective 3:**
Operational Research results strengthened

**Key activities**

- Train regional and District TOTs on Operational Research skills
- Regional and District TOTs to conduct Operational Research on cervical cancer prevention, screening, treatment including palliative care
- Disseminate the findings of Operational Research to all service providers at regional, district and community levels
- Introduce mechanism for assessing quality of services and client satisfaction at all levels (Exit interviews)

**Strategic plan matrix 2011-2015**

**Theme A. Governance and Programme management**

**Goal 1:** To sustain good governance and manage cervical cancer prevention and control at all health facilities

| Strategic objectives | Strategic objective indicator | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic objective 1**: Sustained leadership commitment and good governance towards cervical cancer prevention and control interventions at all levels of the health system | Percentage of leaders who are committed to the NCCPC programme at all levels<br><br>Percentage of health facilities that demonstrate good governance | Develop policy documents on cervical cancer as a public health issue impacting on development agenda | Number of policy documents developed on cervical cancer as a public health issue impacting on development agenda | X | X | | | | **MOHSW (RCHS: NCCPC)** |
| | | Conduct leadership awreness camapaign on cervical cancer prevention and control including gender issues Facilities | Number of standard operating procedures and and quality assurance measures for the interventions instituted athealth facilities | X | X | X | X | X | **MOHSW(RCHS: NCCPC)** |
| | | Include cervical cancer Agenda in management review meetings such as Director's meetings MOHSW, RCHS, RHMTs and CHMTs meetings | Number of Advocacy meetings conducted at national, regional and district levels | X | X | X | X | X | **MOHSW(RCHS: NCCPC)** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Conduct Advocacy Platform for addressing Leaders at national, regional and district levels | Number of Advocacy Platforms conducted at national, regional and district levels | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC in collaboration with CSO and FBOs** |
| **Strategic objective 2:** The NCCPC sustained cervical cancer prevention and control at all health system level | Percentage of health facility levels that sustain the programme of cervical cancer prevention and control | Institute standard operating procedures and quality assurance measures for the interventions in health Facilities | Number of standard operating procedures and and quality assurance measures for the interventions instituted at health facilities | **X** | **X** | | | | **MOHSW(RCHS: NCCPC)** |
| | | Conduct training on Effective Vaccine Stock Management (EVSM) at all levels | Number of trainings conducted on Effective Vaccine Stock Management (EVSM) at all levels | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC)** |
| | | Review HPV vaccine coverage to identify where girls are being missed particularly tracking coverage for girls not in school | Number of HPV vaccine coverage reviewed to identify where girls are being missed particularly tracking coverage for girls not in school | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC and EPI)** |
| | | Expand cold chain distribution and storage capacities at all levels | Number of expanded cold chain spare parts and related supplies | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC and EPI) MSD** |
| | | Procure adequate cold chain spare parts and related supplies | Number and amount of cold chain spare parts and related supplies procured | X | X | X | X | X | **MOHSW (RCHS: NCCPC and EPI) MSD** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Strategic objective 3** The NCCPC programme linked with the EPI and MSD management to get full support for cervical cancer vaccination | Percentage of MSD and EPI management activities linked with NCCPC programme | The NCCPC programme manager to coordinate a quarterly meeting to be attended by MSD and EPI managers | Number of management meetings coordinated by by NCCPC | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC)** |
| | | The NCCPC programme manager to coordinate a yearly meeting to inform all stakeholders on the progress of the NCCPC activities in Tanzania | Number of stakeholders meetings Coordinated by the NCCPC | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC)** |

**Theme B. Policy and Resource Mobilization**

**Goal:** To advocate for development of cervical cancer prevention and treatment enabling policy that will allow its implementation up to the village level

| Strategic objectives | Strategic objective indicator | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic objective 1** Cervical cancer prevention and treatment policy developed and advocated at national, regional and district and community levels | Percentage of prioritized cervical cancer preventive measures and treatment incorporated in the national, regional and district health plans | Build a strong stakeholders coalition to implement advocacy activities at national, regional, district and community levels | Number of stakeholders coalition formed | **X** | | | | | **MOHSW (RCHS: NCCPC)** |
| | | Develop an NCCPC advocacy plan | NCCPC advocacy plan developed | **X** | | | | | **MOHSW (RCHS: NCCPC)** |
| | | Train health workers on behaviour change communication strategies and ensure advocacy performance at all levels | Number of health workers trained on behaviour change communication strategies and ensure local level advocacy | **X** | **X** | **X** | **X** | **X** | **MOHSW (RCHS: NCCPC)** |
| | | Implement the advocacy plan at national levels (relevant sections/departments in the MOHSW and across ministries to integrate NCCPC into relevant existing programs) | Number of ministries /relevant sections departments that integrate NCCPC advocacy plans into their existing plans | **X** | **X** | **X** | **X** | | **MOHSW (RCHS: NCCPC)** |

| Strategic objectives | Strategic objective indicator | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic objective 2** Resources mobilized to ensure successful roll out and future sustainability of the NCCHP | Percentage of funds mobilized by the MOHSW and Partners to ensure successful roll out and future sustainability of the NCCHP | Verify five year national costing for establishing national cervical cancer prevention and control to cover HPV vaccination, 'see and treat' screening including HPV screening, treatment and palliative care services | Verification executed: five year national costing for establishing national cervical cancer prevention and control to cover HPV vaccination, 'see and treat' screening including HPV screening, treatment and palliative care services | **X** | | | | | **MOHSW (RCHS: NCCPC)** |
| | | Advocate at national level (MOFEA, MOHSW and Development Partners) for allocation of funds to cervical cancer activities | Number of advocacy meetings conducted to advocate for allocation of funds for cervical cancer activities | **X** | | | | | **MOHSW (RCHS: NCCPC)** |
| | Percentage of funds mobilized by the Local government to cover the cost of cervical cancer activities | Advocate Local government to incorporate Cervical cancer activities into CCHP | Number of Councils that have incorporated cervical cancer activities into CCHP | **X** | **X** | **X** | **X** | **X** | **PMORALG, DISTRICT COUNCILS** |
| | | Local government to mobilize funds for cervical cancer activities from within and from partners working in their respective District Councils | Amount of funds mobilized by the District Councils from partners working in their respective districts | **X** | **X** | **X** | **X** | **X** | **PMORALG, DISTRICT COUNCILS** |

**Theme C. Primary Prevention**

**Goal 1:** To conduct mass education and awareness campaigns with the aim of preventing cervical cancer in Tanzania.

| Strategic objectives | Strategic objective indicators | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic objective :** Mass education and awareness campaign for prevention of HPV conducted in Tanzania | Percentage of men and women including adolescents who know/ are aware that HPV cause cancer of the cervix | Develop, print and distribute HPV IEC materials and airing TV/radio spots | Number of HPV IEC materials developed, printed, distributed and aired on TV/radio spots | X | X | X | X | X | **MOHSW , MOCDGC, MOEVT** |
| | | Conduct community mobilization, sensitization, and advocacy meetings at all levels | Number of community mobilization and sensitization meetings conducted | X | X | X | X | X | **MOHSW , MOCDGC, MOEVT** |

**Goal 2:** To **achieve universal coverage of HPV vaccination amongst adolescent girls by 2017**

| Strategic objectives | Strategic objective indicators | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic objective 1 :** Vaccination coverage sustained amongst adolescent girls in and out of school | 90% vaccination coverage achieved amongst adolescent girls in and out of school by 2017 | Conduct school sensitization campaigns | | X | X | X | X | X | **MOHSW , MOCDGC, MOEVT** |
| | | Roll out of 3 phase HPV vaccination program for girls in Primary Schools in standard 4: (in 3 regions in 2014/15, in seven additional regions in 2015/16 and Nationwide in 2017) | Number of rolled out HPV vaccination activities by 2017 | X | X | X | X | X | **MOHSW (EPI, NCCPC) MOCDGC, MOEVT** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Procure auto-disable syringes, needles and safety boxes for immunization activities | Number of auto-disable syringes, needles and safety boxes procured for immunization activities | **X** | **X** | **X** | **X** | **X** | **MOHSW (EPI, NCCPC) MSD** |
| | | Forecast vaccines and related materials at all levels | Number of forecasts vaccines and related materials at all levels | **X** | **X** | **X** | **X** | **X** | **MOHSW (EPI, NCCPC) MSD** |
| | | Deploy routine Human Papillomavirus (HPV) Vaccine Coverage Monitoring Tool for dose one, two and three at district, regional and national level | Number of HPV Vaccine Coverage Monitoring Tool deployed at district, regional and national level | **X** | **X** | **X** | **X** | **X** | **MOHSW (EPI, NCCPC) MSD** |
| | | Explore and model integration of HPV vaccination programme with other school health programmes | Number of integration of HPV vaccination explored | **X** | **X** | **X** | **X** | **X** | **MOHSW (NCCPC and EPI)** |
| | | Engage village/ward/street leaders and health committees, parents and religious leaders including madrasat in mobilizing and promote HPV vaccination to all in and out-of schools girls aged 9-13years | Number of village /ward/street leaders and health committees, parents and religious leaders including madrasat engaged in mobilizing and promoting HPV vaccination to all in and out-of schools girls aged 9-13years | **X** | **X** | **X** | **X** | **X** | **NCCPC, Local Government and Faith Based Organizations** |

**Theme D. Secondary prevention: screening, diagnosis & treatment precancerous lesions**

**Goal :** To increase the number of women aged 30 and above with access to and use appropriate, quality cervical cancer screening and early treatment of precancerous lesions to 50% by 2015

| Strategic objectives | Strategic objective indicators | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| Strategic objective: 1 Increased the number of women aged 30 and above with access and use appropriate quality cervical cancer screening and early treatment of precancerous lesions | Percentage of sites offering both screening and early treatment services<br><br>Percentage of women who have received at least one screening visit over a specified time period or one in a lifetime | Engage community mobilizers and public education means as well as organizations like MEWATA to encourage women to access cervical cancer screening services | Number of community mobilizers engaged to encourage women to access cervical cancer screening services | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Introduce cervical cancer screening and treatment services for precancerous lesions in all referral , regional and district hospitals | Number of referral, regional and district hospitals that have introduced cervical cancer screening and treatment services for precancerous lesions | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Adopt/ develop and disseminate comprehensive training package for cervical cancer screening and treatment of precancerous lesions | Number of comprehensive training package for cervical cancer screening and treatment services for precancerous lesions | X | X | X | X | X | **MOHSW: NCCPC** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Avail treatment services for precancerous lesions in using cyotherapy, cold coagulation and LEEP in national/zonal consultants regional and district hospitals Cryotherapy to be introduced at all health facility levels | Percentage of health facilities that use cryotherapy for precancerous lesions | X | X | X | X | X | MOHSW: NCCPC |
| | | Train zonal, regional and district trainers on cervical cancer screening using national training package | Number of zonal, regional and district Trainers trained on cervical cancer screening using national training package | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Orient CHMTs and RHMTs on cervical cancer screening and treatment services to ensure that plans are incorporated into the CCHPs | Number of CHMTs and RHMTs oriented on cervical cancer screening and treatment services to ensure that plans are incorporated into the CCHPs | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Develop/adapt standard job aids and tools for cervical cancer screening service provision | Number of standard job aids and tools adapted for cervical cancer screening service provision | X | X | | | | **MOHSW: NCCPC** |
| | | Conduct regular post training and supportive supervision at all site | Number of regular post training and supportive supervision conducted at all sites | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Provide cervical cancer screening equipment to and establish mechanisms for maintenance | Number of cervical cancer screening equipment provided to health facilities | X | X | X | X | X | **MOHSW: NCCPC** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Strategic objective 2:** Clinical services for cervical cancer screening and treatment of precancerous lesions integrated in other related clinical services in health facilities | Percentage of health facilities that have integrated clinical services for cervical cancer screening and treatment of precancerous lesions in other clinical services | Develop a scale up plan at national, regional and district levels for integrated cervical cancer screening services (RCH,OPD, STI, CTC clinics) | Number of scale up plams developed at national, regional and district levels | **X** | **X** | | | | **MOHSW: NCCPC** |
| | | Establish integrated cervical cancer screening and treatment services to include 'see and treat' approaches at regional and district hospitals and where feasible in lower health facilities (health centres and dispensaries) and in outreach reproductive health clinics | Number of established integrated cervical cancer screening "see and treat" approach at regional and district hospitals. | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Update pre service curricula to address cervical cancer screening and treatment approaches | Pre-service carricula updated address cervical cancer screening and treatment approaches | **X** | **X** | | | | **MOHSW: NCCPC** |
| | | Conduct outreach cervical cancer screening and precancerous treatment services using campaigns or organized community-based clinics to promote uptake of the program | Number of outreach cervical cancer screening and precancerous treatment services conducted using campaigns or organized community-based clinics | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Conduct training for clinicians and nurses to provide cervical cancer screening services and treatment of precancerous lesions | Number of trainings conducted for clinicians and nurses to provide cervical cancer screening services and treatment of precancerous lesions | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Procure and distribute cervical cancer screening and treatment equipment to regional, and district health facilities | Number of cervical cancer screening and treatment equipment distributed to regional, and district health facilities | X | X | X | X | X | **MOHSW: NCCPC, MSD** |
| | | Establish a referral system for all women who need treatment of precancerous lesions and those with possible invasive cervical cancer | Percentage of referred women with precancerous lesions | X | X | X | X | X | **MOHSW: NCCPC** |
| **Strategic objective 3:** HPV DNA testing introduced as a screening method into a selected number of VIA screening sites | Percentage of VIA screening sites that have introduced HPV DNA as a screening method | Establish a national reference laboratory and core group of country experts for HPV DNA as a screening method | Number of HPV DNA testing successfully run per a specified time-frame<br><br>Number quality assurance tests for HPV DNA performed at national reference laboratory per a specified time-frame | X | X | | | | **MOHSW: NCCPC and Diagnostic Unit** |
| | | Initiate WHO Operational Research i.e. large scale demonstration project, designed to pilot and evaluate the feasibility of implementing HPV DNA testing in Tanzania | Lessons generated from WHO operational research on feasibility | X | X | | | | **MOHSW: NCCPC WHO** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | RCHS (Reproductive and Child Health Section: Cancer Unit) to develop a plan, activities, and timeline for HPV DNA screening tasks | A plan of cervical cancer activities developed by RCHS | **X** | | | | | **RCHS: Cancer Unit, WHO** |
| | | MOHSW to train qualified personnel (as required) and technical experts for transferring of HPV testing technology across the country | Number of health personnel trained in performing HPV DNA testing<br><br>Number of national experts available for transferring | **X** | **X** | **X** | **X** | **X** | **RCHS: Cancer Unit, WHO** |

**Theme E. Tertiary prevention: diagnosis, care and treatment of cervical cancer patients**

**Goal :** To increase the number of women who have access to and use quality cervical cancer treatment: surgery, radiotherapy and chemotherapy and palliative care services to 50% by 2015

| Strategic objectives | Strategic objective indicators | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic objective1:** Safe, acceptable and cost effective quality diagnostic and treatment services for cervical cancer established | Percentage of established cervical cancer services that are Safe, acceptable and cost effective quality diagnostic and treatment | Train histopathologists/cytologists in referral hospitals to enable them provide diagnostic services and ensure sustainability. | Number of histopathologists/cytologists trained in referral hospitals to enable them provide diagnostic services and ensure sustainability. | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Procure equipment (teleradiotherapy and brachytherapy machines) and supplies at diagnostic sites. | Number of teleradiotherapy and brachytherapy machines and supplies procured at diagnostic sites | X | X | X | X | X | **MOHSW: NCCPC, MSD** |
| | | Train and recruit trained/competent cadres in consultant/referral and regional hospitals for cervical cancer management | Number of competent cadres in consultant/referral and regional hospitals trained for cervical cancer management | X | X | X | X | X | **MOHSW: NCCPC, WHO** |
| **Strategic objective 2:** Barriers reduced to accelerate the delivery and receipt of quality cervical cancer diagnosis and treatment. | Percentage of barriers reduced to accelerate the delivery and receipt of quality cervical cancer diagnosis and treatment | District councils to develop a system/mechanism to support/assist poor cancer patients for transport costs payment | Number of district councils that developed a system/mechanism to support/assist poor cancer patients for transport costs payment. | X | X | | | | **MOHSW: NCCPC, Local Government** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Raise awareness to the communities in health seeking behaviour related to cervical cancer issues | Number of districts/villageswhere the awareness was raised in health seeking behaviour related to cervical cancer issues.<br>Number of community members attended | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Provide standard guidelines for referral of patients to all health facilities | Percentage of health facilities with standard referral guidelines | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Train health care providers on guidelines for referral of patients to all health facilities | Number of health care providers trained on guidelines for referral of patients | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| **Strategic objective 3** Essential components for palliative care are included in the comprehensive cervical cancer control | Percentage of Health facilities/sites at community level implementing Palliative care drug policy guidelines | Develop guidelines for prevention and management of symptoms due to advanced cervical cancer lesions for health care providers, careers and family members | Number of guidelines developed for prevention and management of symptoms due to advanced cervical cancer lesions for health care providers, caregivers and family members | **X** | | | | | **MOHSW: NCCPC** |
| | | Develop guidelines for continuum of care for terminally ill cervical cancer patients to access all basic care including physical, psychological, spiritual and emotional care within her reach | Number of guidelines developed for continuum of care for terminally ill cervical cancer patient to access all basic care including physical, psychological, spiritual and emotional care within her reach | **X** | | | | | **MOHSW: NCCPC** |

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|---|---|---|---|---|---|---|---|---|---|
| | | MOHSW to facilitate availability of pain management drugs including opiates at health facilities down to district level as per palliative care guidelines and WHO's analgesic ladder | Percentage of health Facilities that have pain management drugs including opiates | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Orient health providers on palliative care drug policy and guidelines and orient community home based care providers on palliative nursing care | % of health providers and community care providers oriented on palliative care Drug policy and guidelines including palliative nursing care respectively | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | MOHSW to ensure palliative care services for cervical cancer patients are well addressed and included in the national palliative care strategy/initiatives | Palliative care services for cervical cancer patients Are included in the national palliative care strategy/initiatives | **X** | **X** | | | | **MOHSW: NCCPC** |

**Theme F: Monitoring and Evaluation**

**Goal: To monitor and evaluate cervical cancer prevention, control and treatment services at all health facility levels**

| Strategic objective | Strategic objective indicator | Activities | Process Indicator | Time frame | | | | | Responsible Department/ organization |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Y 1 | Y 2 | Y 3 | Y 4 | Y 5 | |
| **Strategic Objectives 1:** Cervical cancer prevention, control and treatment services monitored at all health facility levels | **Percentage of health facilities that monitor cervical cancer prevention, control and treatment** | Develop, print and distribute registers and HPV vaccination cards to all implementing levels | Number of HPV registers and vaccination cards developed, printed and distributed | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC and EPI** |
| | | Develop HMIS training package for health care providers, managers and planners and harmonize it to the monitoring and evaluation training package | Number of HMIS training package developed and harmonized to the monitoring and evaluation training package for health care providers, managers and planners | **X** | **X** | | | | **MOHSW: NCCPC,DPP** |
| | | Orient health care providers on HMIS data collection, analysis and utilization of data. | Number of health care providers oriented on HMIS data collection, analysis and utilization of data. | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Orient health care providers on HMIS data collection, analysis and utilization of data. | Number of Health care providers oriented on HMIS data collection, analysis and utilization | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Conduct follow up and supportive supervision of health care providers. | Number of follow up and supportive supervision conducted for health care provider | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| **Strategic Objective 2:** HMIS updated to include cervical cancer indicators | Percentage of cervical cancer indicators included in the HMIS | Integrate cervical cancer prevention and control information into national HMIS (MTUHA) reporting tool | Number of cervical cancer prevention and control information integrated into national HMIS (MTUHA) reporting tool | **X** | **X** | **X** | **X** | **X** | **MOHSW:NCCPC, Directorate of Policy and Planning (DPP)** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Print and distribute integrated cervical cancer prevention and control information into national HMIS reporting tools. | Number of integrated cervical cancer prevention and control information into HMIS reporting tools printed and distributed | X | X | X | X | X | **MOHSW:NCC PC, DPP** |
| | | Adopt/Adapt monitoring indicators across all service levels (PHC, regional and referral hospitals including ORCI) | Number of monitoring indicators adopted/adapted across all service levels | X | X | X | X | X | **MOHSW:NCC PC DPP** |
| | | Orient/train data clerks/officers on updated cervical cancer prevention and control information | Number of data clerks/officers oriented/trained on updated cervical cancer prevention and control information | X | X | X | X | X | **MOHSW: NCCPC** |
| | | Equip health facilities with necessary data capturing tools e.g. computers, paper-based tools | Number of health facilities equipped with necessary data capturing tools | X | X | X | X | X | **MOHSW:NCC PC DPP** |
| | | Monitor the surveillance and response to Adverse Events Following Immunization (AEFI) | Number of monitoring sessions conducted for the surveillance and response (AEFI) | X | X | X | X | X | **MOHSW:NCC PC DPP** |
| | | Distribute monitoring form for HPV vaccination to all health facilities | Number of monitoring form for HPV vaccination distributed to all health facilities | X | X | X | X | X | **MOHSW: NCCPC, EPI** |
| | | Conduct Data Quality Self Assessment (DQSA) for HPV vaccination at national, regional district and community levels | Number of Data Quality Self Assessment (DQSA) for HPV vaccination conducted at national, regional district and community levels | X | X | X | X | X | **MOHSW:NCC PC** |
| | | Conduct post introduction HPV evaluation at each phase | Number of post introduction HPV evaluation | X | X | X | X | X | **MOHSW:NCC PC** |
| | | Review of HPV vaccination performance indicators at each phase | Number of HPV vaccination performance indicators reviewed | X | X | X | X | X | **MOHSW:NCC PC** |

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|---|---|---|---|---|---|---|---|---|---|
| **Strategic objective 3:** Operational Research results strengthened | Percentage of Operational Research results disseminated and used to improve service provision | Train regional and District TOTs on Operational Research skills | Number of regional and district TOTs trained on Operational Research skills | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Regional and District TOTs to conduct Operational Research on cervical cancer prevention, screening, treatment including palliative care | Number of OR conducted by regional and district TOTs on cervical cancer prevention, screening, treatment including palliative care | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Disseminate the findings of Operational Research to all service providers at regional, district and community levels | Number of sessions conducted to disseminate the OR findings to all service providers at regional, district and community levels | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |
| | | Introduce mechanism for assessing quality of services and client satisfaction at all levels (Exit interviews) | Number of health facilities that has introduced the mechanism for assessing quality of services and client satisfaction at all levels | **X** | **X** | **X** | **X** | **X** | **MOHSW: NCCPC** |

**Strategic plan 2011-2015: Logical Framework**

| Results/outputs | Objectively verifiable indicators | Means of verification | Assumptions |
|---|---|---|---|
| **Goal:** To reduce cervical cancer incidence, morbidity and mortality in Tanzania | % of reduction of cervical cancer incidence, morbidity and mortality in Tanzania. | DHS<br><br>Mini Survey | Adequate funds allocated by the MOFEA to the MOHSW to implement cervical cancer services (Prevention, control and treatment) |
| **OUTCOMES:** Reduction of cervical cancer morbidity and mortality in Tanzania**.** | 90% HPV vaccination covered amongst adolescent girls by age and by dose number by 2015 | HPV vaccine log books<br>HPV vaccine cluster survey | Adequate funds allocated by the MOFEA to the MOHSW to implement cervical cancer services (Prevention, control and treatment) |
| | 50% of eligible women have been screened at least once in the past 5 years by 2015, and 80% of those who were screen-positive received treatment. by 2015 | DHS<br><br>Mini Survey | Availability of skilled service providers to implement cervical cancer prevention and control program at all levels<br><br>Availability of cervical cancer equipment and supplies for prevention (HPV vaccine), screening and treatment |

| **A. Governance and Programme management** | | | |
|---|---|---|---|
| **Results/outputs** | **Objectively verifiable indicators** | **Means of verification** | **Assumptions** |
| **Strategic objective 1**<br>Sustained leadership commitment and good governance towards cervical cancer prevention and control interventions at all levels of the health system | Number of specific actions for cervical cancer prevention and control demonstrated by high level leaderships<br>Existence of governance structures for addressing cervical cancer prevention and control | Ministry of health reports | A range of leaders understand the importance of cervical cancer prevention and control interventions |

| | | | |
|---|---|---|---|
| **Strategic objective 2**<br>The NCCPC sustained a cervical cancer prevention and control activities at all health system levels | Percentage of health facility systems that sustain the programme (Vaccinations, Screening, Treatment and Palliative care) for cancer prevention and control | Mini survey<br>Annual reports | All health facility system have adequate funds, service providers and equipment to sustain cervical cancer prevention and control activities |

| **B. Policy and Resource Mobilization** | | | |
|---|---|---|---|
| **Results/outputs** | **Objectively verifiable indicators** | **Means of verification** | **Assumptions** |
| **Strategic objective 1**<br>Cervical cancer prevention and treatment policy developed and advocated at national, regional and district and community levels | Percentage of prioritized cervical cancer preventive measures and treatment incorporated in the national, regional and district health plans | Developed National Policy on cervical cancer prevention and treatment | Willingness of the MOHSW to develop cervical cancer prevention and treatment policy<br><br>***Risk; Delay that could occur to finalize the policy*** |
| **Strategic objective 2**<br>Resources mobilized to ensure successful roll out and future sustainability of the NCCHP | Percentage of funds mobilized by the MOHSW and Partners to ensure successful roll out and future sustainability of the NCCHP | Annual allocation of funds from<br>MOHSW (MTEF) to NCCHP planned activities (National, regional, district and community levels) | The MOHSW readiness to allocate funds for the implementation of the NCCHP<br><br>***Risk: Inadequate funds allocated to MOHSW (Directorate of Preventive services*** |
| | Percentage of funds mobilized by the Local government to cover the cost of HPV vaccination in the country in five years, cervical cancer screening, treatment and palliative care activities | Annual Local government financial reports that show funds mobilized from partners | The Local Government ability to mobilize funds from partners for cervical cancer activities |
| **C. Primary prevention** | | | |
| **Results/outputs** | **Objectively verifiable indicators** | **Means of verification** | **Assumptions** |
| **Strategic objective 1**<br>Mass education and awareness campaign for prevention of HPV conducted in Tanzania | Percentage of men who know/ are aware that HPV cause cancer of the cervix | Mini survey | Awareness and acceptability of men and women including adolescents to be prevented from HPV |
| **Strategic objective 2**<br>Vaccination coverage sustained amongst adolescent girls in and out of school | 90% vaccination coverage achieved amongst adolescent girls in and out of school by age and by dose, 2015 | Mini survey<br><br>Annual report | Availability of HPV vaccine all the time<br><br>Acceptability of parents for adolescents to be vaccinated<br>***Risk: Misconception by the community that HPV cause infertility for girls*** |

**D. Secondary prevention: screening diagnosis & treatment precancerous lesions**

| Results/outputs | Objectively verifiable indicators | Means of verification | Assumptions |
|---|---|---|---|
| **Strategic objective 1**Increased eligible women who have access to and use appropriate, quality cervical cancer screening and early treatment of precancerous lesions | Percentage of eligible women who have access to and use appropriate, quality cervical cancer screening and early treatment of precancerous lesions | Mini survey<br><br>Annual reports NCCHP | Eligible women are accessing health facilities that provide quality cervical cancer screening and early treatment of precancerous lesions<br><br>***Risk: existence of few skilled health providers who could manage to provide quality cervical cancer screening and early treatment of precancerous lesions*** |
| **Strategic objective 2:** Services for cervical cancer screening and treatment of precancerous lesions integrated in other clinical services for scaling up and sustaining the screening in the precancerous lesions | Percentage of integrated services for cervical cancer screening and treatment of precancerous lesions in other clinical services | Annual reports NCCHP | Other clinical services are able to integrate services and have adequate health providers, supplies and equipment for cervical cancer screening and treatment of precancerous lesions<br><br>***Risk: existence of few skilled health providers who could manage to integrate cervical cancer services into other clinical services*** |
| **Strategic objective 3:**<br>HPV DNA testing introduced as a screening method into a selected number of VIA screening sites | Percentage of VIA screening sites that have introduced HPV DNA as a screening method | Mini survey<br><br>Annual reports NCCHP | Availability of HPV DNA to be introduced as a screening method into selected number of VIA screening tests |

**F. Tertiary prevention: diagnosis, care and treatment of cervical cancer patients**

| Results/outputs | Indicators of results | Means of verification | Assumptions |
|---|---|---|---|
| **Strategic objective 1**<br>Safe, acceptable and cost effective quality diagnostic and treatment services for cervical cancer established | Percentage of established cervical cancer services that are Safe, acceptable and cost effective quality diagnostic and treatment | Six monthly exit interview of clients attending cervical cancer interventions (diagnosis and treatment) at randomly selected health facilities<br><br>Annual reports NCCHP | Adequate trained health workers who are able to provide quality services<br><br>Adequate equipment for diagnosis, care and treatment of cervical cancer patients |
| **Strategic objectives 2**<br>Reduction of barriers accelerated to delivery and receipt of quality cervical cancer, diagnosis, treatment. | Number of identified barriers addressed | Six monthly exit interview of clients attending cervical cancer interventions (diagnosis and treatment) at randomly selected health facilities<br><br>Annual reports NCCHP | Adequate education and sensitization activities to the community on cervical cancer diagnosis, care and treatment<br><br>***Risks:***<br>***Poor attendance of community members during sensitization activities***<br><br>***Inadequate IEC materials on cervical cancer information distributed to the community members*** |
| **Strategic objective 3:**<br><br>Essential components for palliative care are included in the comprehensive cervical cancer control | Percentage of Health facilities/sites at community level implementing Palliative care drug policy | Mini survey<br><br>Annual reports NCCHP | Acceptability by planners to include essential components for palliative care in the comprehensive cervical cancer control<br>***Risk***<br>***Inadequate inclusion of essential components for palliative care in components for palliative care*** |

**F. Monitoring and Evaluation**

| Results/outputs | Indicators of results | Means of verification | Assumptions |
|---|---|---|---|
| **Strategic objective 1**:Cervical cancer prevention, control and treatment services monitored at all health facility levels | % of facilities reporting basic service indicators related to cervical cancer | Annual reports NCCHP | Cervical cancer prevention, control and treatment services are offered/provided at all health facility levels |
| **Strategic objective 2:** HMIS updated to include cervical cancer indicators | Percentage of cervical cancer indicators updated and included in the HMIS | HMIS<br><br>Annual reports NCCHP | Cervical cancer indicators included in the HMIS |
| **Strategic objective 3:**<br>Data Management and utilization of operational Research results strengthened | Percentage of operational research results utilized to improve cervical cancer control and treatment | Operation research reports<br><br>Annual reports NCCHP | Researchers readiness to accept the conduction of operation research at health facilities<br><br>***Risk; Inadequate funds allocated to conduct Operation research*** |

## MONITORING AND EVALUATION INDICATORS

### 1. Policy for cervical cancer prevention and treatment clearly defined and documented

| No | Indicator | Numerator | Denominator | Source | Frequency |
|---|---|---|---|---|---|
| 1 | Percentage of prioritized cervical cancer preventive measures and treatment incorporated in the national, regional and district health plans | Number of prioritized cervical cancer preventive measures and treatment incorporated in the national, regional and district health plans | Number of cervical cancer preventive measures and treatment incorporated in the national, regional and district health plans | CHMTs Supervision reports<br><br>RCHS Annual reports | Semi Annual<br><br>Annually |

### 2. Resources mobilized to ensure successful roll out and future sustainability of the NCCHP

| No | Indicator | Numerator | Denominator | Source | Frequency |
|---|---|---|---|---|---|
| 1 | Percentage of resources mobilized to ensure successful roll out and future sustainability of the NCCHP | Amount of resources mobilized at the MOHSW, at regional, district and community levels | Amount of resources mobilized at MOHSW and at all regional, district and community levels | CHMTs Supervision reports<br><br>RCHS Annual reports | Semi Annual<br><br>Annually |

### 3.Behaviour change Communication and capacity building

| No | Indicator | Numerator | Denominator | Source | Frequency |
|---|---|---|---|---|---|
| 1 | Percentage of RH print materials with cervical cancer prevention and control messages printed and disseminated | Number of print materials with cervical cancer prevention and control messages printed and disseminated | Number of RH print materials printed and disseminated | CHMTs Supervision reports<br>RCHS Annual reports<br>TSPA | Semi Annual<br><br>Annually |
| 2 | Percentage of RH radio programs with cervical cancer prevention and control messages produced and aired | Number of radio programs with cervical cancer prevention and control messages produced and aired | Number of RH radio programs produced and aired | CHMTs Supervision reports<br>RCHS Annual reports<br>TSPA | Semi Annual<br><br>Annually |
| 3 | Percentage of RH service delivery points with print materials with cervical cancer prevention and control messages | Number of RH service delivery points with print materials with cervical cancer prevention and control messages | Number of RH service delivery points | CHMTs Supervision reports<br>RCHS Annual reports<br>TSPA | Semia Annual<br><br>Annually<br>Every Five years |

| | | | | | |
|---|---|---|---|---|---|
| 4 | Proportion of females age 9 to 49 with knowledge on cervical cancer prevention and control | Number of females age 9 to 49 with knowledge on cervical cancer prevention and control | Number of females age 9 to 49 | Special surveys for age 9 to 14;<br>TDHS for age 15 to 49; | Every two years<br><br>Every Five Years |
| 5 | Proportion of males age 15 to 49 with knowledge on cervical cancer prevention and control | Number of males age 15 to 49 with knowledge on cervical cancer prevention and control | Number of males age 15 to 49 | TDHS | Every five years |
| 6 | Percentage of District Councils with campaign action plans on cervical cancer prevention and control | Number of District Councils with campaign action plans on cervical cancer prevention and control | Number of District Councils | CHMTs reports | Semi Annually |
| 7 | Proportion of District Councils that have conducted HPV vaccine awareness media campaigns in the past six months | Number of District Councils that have conducted HPV vaccine awareness media campaigns in the past six months | Number of District Councils | CHMTs reports | Semi Annually |
| 8 | Proportions of wards that have conducted community mobilization events on cervical cancer | Number of wards that have conducted community mobilization events on cervical cancer | Number of Wards | CHMTs reports | Semi Annually |
| 9 | Proportion of service providers trained on cervical cancer prevention and control | Number of service providers trained on cervical cancer prevention and control | Number of all service providers | CHMTs Supervision reports<br>RCHS Annual reports<br>TSPA | Semia Annual<br><br>Annually<br>Every Five years |
| 10 | Proportion of community health workers trained on cervical cancer prevention and control | Number of community health workers trained on cervical cancer prevention and control | Number of all Community Health workers | CHMTs Supervision reports RCHS Annual reports TSPA | Semia Annual<br>Annually<br>Every Five years |

### 4.1 Prevention: HPV vaccination

| No | Indicator | Numerator | Denominator | Source | Frequency |
|---|---|---|---|---|---|
| 1 | Percentage of girls fully vaccinated | Number of girls fully vaccinated | Number of girls aged 9 to 13 years | Health Facility records, HMIS | Monthly |
| 2 | Percentage of girls partially vaccinated | Number of girls partially vaccinated | Number of girls aged 9 to 13 years | Health Facility records, HMIS | Monthly |
| 3 | Percentage of RH facilities with a working refrigerator | Number of RH facilities with a working refrigerator | Number of all RH facilities | Health Facility records, HMIS | Monthly |

### 4.2 Prevention: Screening cervical cancer

| No | Indicator | Numerator | Denominator | Source | Frequency |
|---|---|---|---|---|---|
| 1 | Percentage of new clients screened with VIA | Number of new clients screened with VIA | Number of all new female clients aged 30 to 50 years | Health Facility records, HMIS | Monthly |
| 2 | Percentage of new clients screened for HIV | Number of new clients screened for HIV | Number of all new female clients aged 30 to 50 years | Health Facility records, HMIS | Monthly |
| 3 | Percentage of clients with precancerous lesions treated with Cryotherapy | Number of women diagnosed with pre cancerous lesions treated with Cryotherapy | Total Number of women with pre cancerous lesions eligible for treatment with Cryotherapy | Health Facility records, HMIS | Monthly |
| 4 | Percentage of new clients with positive VIA results | Number of new clients positive VIA results | Number of women receiving initial VIA screening | Health Facility records, HMIS | Monthly |
| 5 | Percentage of new clients with suspect cancer | Number of new clients with suspect cancer | Number of women receiving initial VIA screening | Health Facility records, HMIS | Monthly |
| 6 | Percentage of clients with VIA positive results treated with cryotherapy | Number of women treated with cryotherapy | Number of women tested positive for VIA | Health Facility records, HMIS | Monthly |
| 7 | Percentage of clients with VIA positive results treated with LEEP | Number of women treated with LEEP | Number of women tested positive for VIA | Health Facility records | Monthly |

| | | | | | |
|---|---|---|---|---|---|
| 8 | Percentage of clients referred for large lesion | Number of women with positive VIA results refereed for large lesions | Number of women tested positive with VIA | Health Facility records, HMIS | Monthly |
| 9 | Percentage of clients referred for suspect cancer | Number of women with positive VIA results refereed for suspect cancer | Number of women screened with VIA | Health Facility records, HMIS | Monthly |

**5. Treatment of screened patients/clients**

| No | Indicator | Numerator | Denominator | Source | Frequency |
|---|---|---|---|---|---|
| 1 | Percentage of screened clients treated surgically | Number of women treated surgically | Number of women screened | Health Facility records, | Monthly |
| 2 | Percentage of screened clients referred for surgery receiving prescribed treatment | Number of women treated surgically | Number of women referred for surgery who receive treatment | Health Facility records, | Monthly |
| 3 | Percentage of screened clients treated with chemotherapy/ radiation therapy | Number of women treated with chemotherapy/radiation therapy | Number of women screened | Health Facility records, | Monthly |
| 4 | Percentage of screened clients referred for chemotherapy/radiation therapy receiving prescribed treatment | Number of women treated with chemotherapy/radiation therapy | Number of women referred for chemotherapy/ radiation therapy who receive treatment | Health Facility records, | Monthly |


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