Regional Workshop on Cervical Cancer Control and HPV Vaccination

28–30 November 2011
Manila, Philippines
REPORT

REGIONAL WORKSHOP ON CERVICAL CANCER CONTROL
AND HPV VACCINATION

Convened by:

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC

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NOTE

The views expressed in this report are those of the participants in the Regional Workshop on Cervical Cancer Control and HPV Vaccination and do not necessarily reflect the policies of the Organization.

This report has been prepared for the World Health Organization Regional Office for the Western Pacific for the use of governments from Member States in the Region and for those who participated in the Regional Workshop on Cervical Cancer Control and HPV Vaccination held at the WHO Regional Office of the Western Pacific, Manila, Philippines from 28 to 30 November 2011.
**LIST OF ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>AEFI</td>
<td>adverse events following immunization</td>
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<tr>
<td>CIN</td>
<td>cervical intraepithelial neoplasia</td>
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<td>EPI</td>
<td>Expanded Programme on Immunization</td>
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<td>HPV</td>
<td>human papillomavirus</td>
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<td>IEC</td>
<td>information, education and communications</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<tr>
<td>VIA</td>
<td>visual inspection with acetic acid</td>
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<td>WHO C4P Tool</td>
<td>WHO cervical cancer control costing and planning tool</td>
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1. **INTRODUCTION**

1.1 **Background**

Cervical cancer is the third most common cancer among women globally, with more than 85% of the burden occurring in developing countries. In the Western Pacific Region, there are more than 100,000 cases of cervical cancer each year, causing nearly 50,000 deaths. Cervical cancer is a preventable disease, and a high level of control has been achieved in many high-income countries. A comprehensive cervical cancer control strategy includes human papillomavirus (HPV) vaccination, screening and treatment of pre-cancerous cervical lesions to prevent progression, and appropriate treatment and palliative care for invasive cervical cancer. Effective implementation of this strategy requires cross-disciplinary coordination across immunization, adolescent health, reproductive health, cancer and laboratory programmes and health systems.

Planning and implementation of a comprehensive cervical cancer control plan poses substantial challenges for countries with limited resources. These challenges and potential strategies to overcome them were summarized at a country consultation conducted in 2007 by the WHO regional offices for South-East Asia and the Western Pacific and an expert consultation in 2009. A subsequent United Nations Population Fund (UNFPA) Asia and Pacific country consultation in 2010 led to a consensus statement calling on UN agencies to support countries in developing comprehensive cervical cancer control programmes and to advocate for price reductions and integration of HPV vaccination into national programmes.

Some countries have made substantial progress since then, particularly in introducing HPV vaccine. WHO recommends the inclusion of HPV vaccine in national immunization programmes in countries where cervical cancer is a public health priority and vaccination is feasible and sustainable. Uptake of the vaccine in low- and middle-income countries has been limited by high cost and by the complexity of delivering vaccine to the target population of young adolescent girls. However, vaccine prices are gradually declining, GAVI Alliance support is anticipated in 2012, and through country-driven initiatives, several middle-income countries in the Western Pacific Region have found successful approaches to introduce HPV vaccine. These countries have gained important experience in HPV vaccine implementation in schools, health centres and community settings. Those experiences will be useful to countries considering HPV vaccine introduction.

Cervical cancer screening strategies for low-resource settings have been developed and proven effective, though wide-scale implementation is still limited by resource constraints. Current programmes and approaches for comprehensive cervical cancer control were reviewed and options for strengthening screening and early detection appropriate to the local context were discussed. The need for robust programme monitoring and surveillance systems, especially cancer registries, were highlighted as these are essential for measuring the success of both screening and vaccination programmes.

Global focus on noncommunicable diseases increased in 2011, and was discussed at a United Nations high-level meeting on the prevention and control of noncommunicable diseases in September 2011. As countries commit to increase efforts to combat noncommunicable diseases, there is a critical opportunity to strengthen cervical cancer control and to build on the experiences of countries which have successfully implemented HPV vaccination.
1.2 Objectives

(1) to review progress in establishing cervical cancer control programmes and assess capacity and preparedness for HPV vaccination in low- and middle-income countries in the Western Pacific Region;

(2) to provide technical updates on cervical cancer screening, HPV vaccination, related cost effectiveness and impact analyses, and delivery, monitoring and surveillance systems;

(3) to share experiences and lessons learnt by countries with successful programmes; and

(4) to use technical updates and lessons learnt to develop country-specific action plans to determine the role of HPV vaccination (priority, feasibility and sustainability), to prepare for HPV vaccine introduction, or to strengthen HPV vaccination programme monitoring and evaluation where already introduced.

1.3 Participants

The meeting was attended by 28 delegates from Western Pacific Region Member States, four temporary advisers and consultants, and five observers. The participating Member States were Cambodia, China, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, the Lao People’s Democratic Republic, Malaysia, Mongolia, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Vanuatu, and Viet Nam. Eight staff from the WHO Regional Office for the Western Pacific, six staff from WHO country offices, two staff from WHO Headquarters and one staff from UNFPA formed the Secretariat for the meeting. The list of participants, temporary advisers, observers and Secretariat members is in Annex 1.

1.4 Organization

The meeting comprised seven sessions. The sessions included presentations by temporary advisers, WHO Secretariat and country representatives. Participants also engaged in group discussions and presentations on progress in cervical cancer control including HPV vaccination, priority setting and planning processes, and potential next steps for action in their countries. A full outline of the programme is presented in Annex 2.

1.5 Opening ceremony

The meeting was opened by Dr Teodora Wi, Acting Director for Combating Communicable Diseases, WHO Regional Office for the Western Pacific, on behalf of Dr Shin Young-Soo, WHO Regional Director for the Western Pacific.

Dr Wi stressed that a comprehensive approach is critical to achieving cervical cancer control. This includes screening and treatment of pre-cancerous cervical lesions to prevent progression, and appropriate treatment and palliative care for invasive cervical cancer. In addition, Dr Wi also talked about HPV vaccination as a relatively new tool in this comprehensive approach and its inclusion in national immunization programmes.
2. PROCEEDINGS

2.1 Comprehensive cervical cancer control and HPV vaccination: global and regional updates

2.1.1 Comprehensive cervical cancer control: regional overview

Dr Cherian Varghese, Medical Officer, Noncommunicable Diseases, WHO Regional Office for the Western Pacific, presented the overview of cervical cancer control and emphasized that the Region has almost 20% of the world's cervical cancer incident cases and 17% of cervical cancer deaths. Cancer of the cervix uteri is among the most common cancers in women in 12 countries in the Region. The constraints to comprehensive cervical cancer control programme are:

1. political barriers, such as;
   (a) lack of priority for cervical cancer;
   (b) lack of priority for women’s sexual and reproductive health, and
   (c) lack of national policies and appropriate guidelines;

2. community and individual barriers, such as;
   (a) lack of awareness of cervical cancer as a health problem, and
   (b) attitudes, misconceptions and beliefs that inhibit discussions about diseases of the genital tract;

3. economic barriers, such as lack of resources; and

4. technical and organizational barriers caused by poorly organized health systems and weak infrastructure.

Suggestions to move forward include:

1. using proven cost-effective interventions;

2. prioritizing components and interventions, since not all can be taken up immediately;

3. contextualizing country settings, since machines and processes in a high-income country may not be immediately relevant for a country in a low-resource situation;

4. sustaining interventions as cancer control is a long journey, and cannot be addressed by campaign or one week programme; and

5. increasing incrementally, beginning with the most feasible activities.

2.1.2 HPV vaccination: technical update and global status

Dr Susan Wang, Medical Officer, Expanded Programme on Immunization (EPI), WHO, presented a technical update and global overview of HPV vaccination. WHO recommends HPV vaccination as one component of comprehensive cervical cancer control. The WHO position paper on HPV vaccine recommends that HPV vaccination be introduced into national
immunization programmes where prevention of cervical cancer is a public health priority, where HPV vaccine introduction is programmatically feasible and financially sustainable, and where cost-effectiveness aspects have been considered. The WHO-recommended primary target population is girls nine to 13 years old. Two HPV vaccines, both requiring three doses over six months, are widely licensed and WHO-prequalified: a bivalent vaccine covering HPV types 16 and 18 and a quadrivalent vaccine covering HPV types 6, 11, 16 and 18. HPV types 16 and 18 cause about 70% of cervical cancers globally, while types 6 and 11 cause genital warts. As of October 2011, 36 countries in the world have introduced HPV vaccine into their national immunization programmes.

There are several unique challenges in introducing HPV vaccination. The target population is an age group not served routinely by immunization programmes, so effective delivery strategies for this group must be defined. School-based, health centre-based and outreach delivery of HPV vaccination have been used effectively. HPV vaccination involves a different set of stakeholders and partners as compared to infant vaccination, and provides opportunities to establish key preventive health services for young adolescents. Pilot projects have been useful for identifying best approaches for countries to deliver HPV vaccination, and investments in information, education and communication have been found to be critical. For school-based programmes, coordination with the ministry of education and engagement of local school staff have been important facilitating factors. Based on currently available data from GAVI-eligible countries, start-up costs for HPV vaccination programmes average US$ 3 per girl, and operational costs average US$ 4.2 per girl, excluding vaccine costs. WHO offers a range of tools and resources to assist countries in decision-making and planning for HPV vaccine introduction. These include burden of disease data, costing tools, and guidelines for programme monitoring and evaluation. WHO and UNICEF also provide guidance for vaccine donations, which have been a common source of HPV vaccine for pilot projects. As of 2012, GAVI will accept applications for HPV vaccine support from eligible countries.

2.1.3 HPV vaccination: regional overview

Dr Kimberley Fox, Technical Officer, EPI, WHO Regional Office for the Western Pacific, presented an overview of HPV vaccination in the Western Pacific Region. Studies in eight countries in the Region have found that about 70% of cervical cancers are caused by HPV types 16 and 18, consistent with to global findings. As of November 2011, HPV vaccine had been introduced in 15 countries and areas in the Region, with three additional countries planning introduction in 2012. Programmes implemented in low- and middle-income countries in the Region use both the quadrivalent and bivalent vaccines, most of these programmes target girls nine to 13 years old or a subset of these ages, and most conduct school-based vaccination with back-up vaccination through health centres. Most vaccines are donated or provided by donors, while most operational costs are covered by governments. Primary school completion rates are high in many low- and middle-income countries in this Region, making it possible to achieve high coverage through school-based vaccination. Many countries in the Region have experience with school-based delivery of other vaccines such as measles vaccine or tetanus toxoid but are targeting different age groups with the HPV vaccine.

2.1.4 Experience from Australia in monitoring and surveillance for the comprehensive cervical cancer programme

Dr Dorota Gertig, National HPV Vaccination Program Registrar and Medical Director of the Victorian Cervical Cytology Registry, Australia, presented experience with monitoring and surveillance for a comprehensive cervical cancer programme. Dr Gertig described the Australian cervical cancer screening programme and its documented impact through state-based Pap registers and the cervical cancer registry. The national HPV vaccination programme targeting girls 12–13 years old began in 2007 and achieved high coverage. Vaccine impact has been clearly demonstrated through HPV prevalence surveys and a cervical cytology registry. The
cytology results, published in the Lancet earlier in 2011, showed a reduction in high-grade abnormalities among women under 18 years old (those targeted for HPV vaccination since the program began) but not among older women. Dr Gertig also noted the importance of continued surveillance for adverse events following immunization (AEFI).

2.1.5 Comprehensive cervical cancer control: technical update and global status

Dr Nathalie Broutet, Department of Reproductive Health and Research, WHO, presented the difference in cervical cancer deaths between developing and developed countries. The difference is largely due to large-scale screening and early treatment that are widely available in developed countries. Dr Broutet also stressed that the choice of screening test in countries is dependent on various factors such as local infrastructure, coverage, and cost.

2.2 Progress in cervical cancer control including HPV vaccination in the Western Pacific Region

Participating countries reported on the situation of national cervical cancer control, including the challenges and opportunities (Tables 1 and 2, Annex 3), and the status of HPV vaccination (Table 3, Annex 4).

2.3 Responses to country presentations

Dr Varghese recognized the challenges faced by countries in terms of quality and quantity of test and treatment, geography, compliance, resources, manpower, and monitoring. A few considerations were presented such as: increasing the coverage of VIA and cryotherapy as it can achieve good results and starting in one island or district first to get the system organized before expanding to the whole country. If hospital-based registries are available, focus on improving the quality of information collected before expanding to population-based registries. Introduce pain relief and palliative care to those with advanced stage diseases as an essential component.

2.4 Successful experiences and tools for cervical cancer control and HPV vaccination programmes

2.4.1 Experience from the Commonwealth of the Northern Mariana Islands: Keys to success in school-based HPV vaccination

Ms Mariana Coats Sablan, former National EPI Manager for the Commonwealth of the Northern Mariana Islands, shared the experience with a school-based HPV vaccination campaign targeting high school girls. The campaign promoted HPV vaccination through a combination of media (cable television, radio, newspapers, posters, pamphlets and t-shirts) and engagement of government, faith-based, social, and charitable organizations. Educational meetings were held for school officials and parents. High coverage of girls on the school rosters was obtained through repeated reminders, individual explanations to parents and community follow-up. Out-of-school girls were vaccinated through public and private clinics.

2.4.2 Introduction to principles of economic evaluation for cervical cancer prevention and control programmes

Dr Mark Jit, Modelling and Economics Unit, Health Protection Agency, reviewed the concepts of economic evaluation and tools available. Economic evaluation can be used to assess the cost, budget impact, cost-effectiveness or cost-utility of an intervention. Cervical cancer programme managers may be interested in assessing various strategies for HPV vaccination of girls and for cervical cancer screening and management. Several tools are available free-of-cost, including the WHO-CHOICE tool and a tool under development, CerviVac. Dr Jit noted that it is important to understand the strengths and limitations of particular models before their results are
used for decision-making. WHO provides guidance to countries on the use and interpretation of economic models.

2.4.3 Costing, affordability and sustainability of cervical cancer prevention and control: introduction of the WHO Cervical Cancer Prevention and Control Costing and Planning (C4P) Tool.

Dr Ann Levin, WHO consultant, presented an overview of the WHO Cervical Cancer Control Costing and Planning (C4P) Tool, which estimates the incremental costs of HPV vaccine introduction and cervical cancer screening and treatment delivery strategies. It is designed for programme managers and policy-makers, and may also be useful for donors and researchers. The C4P tool estimates financial and economic costs using micro-costing data and budget expenditure data. The tool allows comparison of resource requirements for different HPV vaccine introduction strategies and different cervical cancer screening and treatment strategies. Users enter cost data on worksheets after they select which services will be delivered, where and when. The tool generates five-year detailed cost estimates and summaries, and provides charts and graphs to display the results. The C4P tool and corresponding technical support is available through WHO.

2.4.4 Facilitated discussion on economic issues in country priority-setting and planning processes

Dr Jit and Dr Levin facilitated discussions with participants in two groups. The discussion on cost-effectiveness tools focused on:

1. use of cost-effectiveness to inform vaccination and screening policy;
2. procurement and tendering issues;
3. comparison of cost-effectiveness among vaccines for priority-setting; and
4. data requirements for models: the importance of good data on disease burden and costs.

The discussion on the WHO C4P tool focused on using the tool:

1. to improve planning for changes in programmes such as introducing HPV vaccine, switching from cytology to VIA, or using a mix of cytology and VIA in different areas; and
2. to provide costing input to cost-effectiveness analysis for countries considering options and priorities.

2.5 Work groups

Participants were divided into work groups to identify critical barriers to implementing or strengthening HPV vaccination and comprehensive cervical cancer control programmes, and use the technical updates and lessons learnt from other countries to suggest solutions to these barriers. The groups also discussed the role of HPV vaccination in their countries and potential technical support needs over the next year for their cervical cancer control programmes.

2.5.1 Two work groups discussed critical challenges, the role of HPV vaccination and technical support needs in low- and lower middle-income country settings. A third group discussed the same issues in the context of Pacific island countries and areas. Critical barriers were:
(1) absence of national policies and guidelines for cervical cancer control;

(2) unclear institutional responsibility for cervical cancer and need for coordination among several programmes including cancer, reproductive health and immunization;

(3) limited awareness of cervical cancer among the general public and sensitivity around the topic;

(4) costs of HPV vaccine and equipment for VIA;

(5) complexity of implementing cervical cancer screening programmes, including the need for referral and follow-up systems;

(6) weak health systems including laboratories, the health workforce and data systems such as cancer registries;

(7) limited capacity to provide treatment and palliative care; and

(8) external pressure to consider HPV vaccine without priority-setting.

The groups noted that while HPV vaccination could benefit their countries, in some cases, health systems issues first need to be addressed. Pilot HPV vaccination was seen as useful to identify the requirements for success before scaling up nationally. Open discussion of priorities and cost-effectiveness analysis were suggested as ways to strengthen decision-making about vaccine introduction. Participants from countries already using HPV vaccine noted the need to improve programme monitoring data collection. Technical support needs included:

(1) developing national cervical cancer control policy;

(2) developing information, education and communications (IEC) materials;

(3) conducting costing exercises for both cervical cancer screening programmes and HPV vaccination programmes;

(4) analyzing and setting priorities among new vaccines, and procuring vaccines;

(5) implementing HPV vaccine post-introduction evaluation for countries that have already introduced vaccine;

(6) adapting cervical cancer control guidelines to country-specific implementation, including strategies to increase screening coverage and establish a cancer registry;

(7) developing guidelines and training materials, and identifying master trainers for VIA and cryotherapy; and

(8) developing country-specific palliative care implementation guidelines.

2.5.2 A fourth group discussed critical barriers and solutions in middle-income country settings. This group raised many of the same issues faced by low and lower-middle income countries and Pacific island countries and areas. In addition, the group noted the issues of urban-rural disparity in availability of trained health-care workers, quality assurance for screening programmes, and vaccine supply. Advocacy and the use of evidence, including cost-effectiveness analysis, were seen as important to address the challenges. It was noted that for long-term
monitoring, HPV vaccination registries should be linked to cancer registries, which the participants felt to be feasible. Technical support needs for the middle-income countries included:

1. developing operational guidelines for cervical cancer screening and HPV vaccination programmes;
2. training in colposcopy and cytology;
3. providing costing and cost-effectiveness analyses for cervical cancer screening strategies and HPV vaccination programmes;
4. developing data analysis and programme monitoring plans; and
5. providing resource lists, including written materials and experts available for consultation.

2.6 Applying lessons learnt to future plans

Representatives from each country developed action plans to strengthen cervical cancer control, with specific steps for the next six to 12 months in one or more of these areas: assessing the role of HPV vaccination in the country, preparing for HPV vaccine introduction, implementing an HPV vaccination programme, monitoring and evaluating the HPV vaccination programme, strengthening the cervical cancer screening programme, strengthening cervical cancer treatment and referral, and establishing a cancer registry.

2.6.1 Country plans

Each country presented their action plans. A summary of these plans is in Table 4 (Annex 5).

2.6.2 Partner workgroup report and discussion

Dr Vivien Tsu, Associate Director for Reproductive Health, PATH, reviewed PATH’s experience in cervical cancer screening, pre-cancer treatment and introduction of the HPV vaccines. Early work focused on VIA screening and cryotherapy treatment, validating the technologies and exploring programmatic strategies. PATH has also been involved in development of the new molecular test careHPV™ (QIAGEN) which has demonstrated high sensitivity and good results with self-collected vaginal samples, and will be launched commercially in India by March 2012.

PATH’s HPV vaccine project (2006–2012) was designed to generate the evidence for informed decision-making about public sector introduction of HPV vaccines. The project was implemented in India, Peru, Uganda and Viet Nam. Formative research was first conducted to explore sociocultural issues, health system capacity, and the policy environment. This information was used to guide the design and implementation of demonstration immunization projects in the four countries; the projects were evaluated in terms of coverage, acceptability, feasibility, and cost. Common lessons learnt by the four countries were:

1. High uptake of the vaccine is achievable in a variety of settings.
2. Acceptability is high if parents receive the information they need in a timely and accessible manner, and if messages build on existing positive attitudes towards immunization and cancer prevention.
There are many feasible delivery strategies (through schools, facilities, or integrated community outreach programmes).

Start-up costs may be high initially, but decrease with experience.

Resources for both screening and vaccination are available on PATH’s cervical cancer website (www.rho.org). Findings, sample communication materials that can be adapted, and links to useful materials from other organizations are also available.

3. CONCLUSIONS AND NEXT STEPS

3.1 Conclusions

The Regional Workshop on Cervical Cancer Control and HPV Vaccination successfully stimulated an exchange of experience and expertise among Member States, WHO and resource persons. Technical updates and lessons learnt provided valuable input to the country action plans.

The requirements of a comprehensive cervical cancer control programme were summarized for each of the following elements:

1. Policy: prevention and control policy at the national level as part of an overall cancer control plan;
2. Programme: governance and operational structure institutionalized;
3. Screening test: selection depending on resources and feasibility;
4. Operational aspects for screening programme: clearly identified population, unique identifiers, call-recall mechanism, referral chain, and quality control;
5. Operational aspects for HPV vaccination programme: access to the selected target population, collaboration with school systems if vaccination school-based, strategy for reaching missed girls, unique identifiers, and cold chain;
6. Budget: adequate uninterrupted funds;
7. Personnel: availability of trained personnel for each level of care;
8. Monitoring: registry or similar mechanism to track vaccination, screening outcomes and cancer incidence;

Key challenges to implementing a successful comprehensive cervical cancer programme were summarized and include:

1. addressing the range of components in a comprehensive approach;
2. linking across programmes (cancer control, reproductive health, and immunization);
3. selecting an appropriate strategy and screening test;
4. costing, monitoring and assessing impact;
5. building technical capacity of health personnel; and
6. obtaining adequate and reliable resources.
Additional challenges specific to implementing an HPV vaccination programme were summarized:

1. Deciding on vaccine introduction based on evidence of disease burden, cost-effectiveness and prioritization;
2. Communicating with parents, girls, teachers and other school staff, and health-care workers;
3. Defining strategies to reach out-of-school or missed girls;
4. Implementing a consent process, especially for school-based vaccination; and
5. Establishing effective monitoring systems.

3.2 Next steps

The workshop identified several principles for establishing and strengthening comprehensive cervical cancer control programmes.

1. When planning a comprehensive approach, prioritize activities to implement as all components cannot be taken up at once. Start with the most feasible activity and increase the number of activities incrementally.
2. Use proven interventions, following available guidelines and other resources.
3. Adapt strategies to the local context, considering infrastructure, resources, and other factors.
4. Plan for sustainability as cancer control is a long journey.
5. Monitor the programme to identify strengths and areas for improvement; measure the impact to generate evidence to sustain policy and funding.

Participants were advised to review and finalize the draft country action plans through national consultation with stakeholders. Key stakeholders in government include the ministry of health (programmes covering cancer, immunization, reproductive health, school health and information systems), ministry of education, and ministry of finance or planning. In addition, professional associations, schools of medicine and public health, and other organizations can provide important contributions toward planning and implementing comprehensive cervical cancer control.
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LIST OF PARTICIPANTS, CONSULTANTS, TEMPORARY ADVISERS, OBSERVERS AND SECRETARIAT

1. PARTICIPANTS

CAMBODIA
Dr Chhun Loun, Chief, Noncommunicable Diseases Control, Ministry of Health
151-153 Kampuchea Krom Street, Phnom Penh; Tel no. +855 11 953 124
Fax no. +855 976 350 495; Email: chhunloun@yahoo.com

CHINA
Ms Jiangli Din, Research Associate, National Center for Women and Children Health
Chinese Center for Disease Control and Prevention, No. 400, Xiao Nanzhuang Block
Wan Quanhe Road Haidian District, Beijing; Tel no. +8610 8264 7855; Fax no. +8610
8264 7800; Email: dijiangli@chinawch.org.cn

Dr Dapeng Yin, Chief, National Immunization Programme, Chinese Center for Disease
Control and Prevention, No. 400, Xiao Nanzhuang Block Wan Quanhe Road, Haidian
District, Beijing; Tel no. +8610 8315 9833; Fax no. +8610 8315 9833
Email: yindapeng2001@263.net

COOK ISLANDS
Ms Rufina Tutai, Acting Chief Public Health Nurse, Ministry of Health
P.O. Box 109, Rarotonga; Tel no. +682 29110; Fax no. +682 29110
Email: r.tutai@health.gov.ck

Dr Rangi Fariu, Director, Community Health, Ministry of Health
P.O. Box 109, Rarotonga; Tel no. +682 29110; Fax no.+682 29110
Email: r.fariu@health.gov.ck

FIJI
Ms Litiana Saunivalu Golea, National EPI and Cold Chain Coordinator
Ministry of Health, 88 Amy Street, Suva; Tel no. +338 8000 ext 109;
Fax no. +338 8003; Email: lvolavola@yahoo.com

KIRIBATI
Ms Tikua Tekitanga, Principal Nursing Officer, (EPI Coordinator)
Ministry of Health and Medical Services, Nawerewere, Tarawa
Tel no. +686 28760; Fax no. +686 28152; Email: tikutanga@gmail.com

Ms Tiero Tetabea, Acting Director, Laboratory Services and
In-charge of Cytology Unit, Ministry of Health and Medical Services, Tarawa
Tel no. +686 99718; Fax no. +686 28152; Email: tareieta@gmail.com
Annex 1

LAO PEOPLE’S DEMOCRATIC REPUBLIC
Dr Daothong Thepsouvann, Director, Hospital Mitthaphab BanPhonessavanh
Ministry of Health, Vientiane; Tel no. +856 21 216526; Fax no. +856 21 710005
Email: t.daovone@yahoo.fr

Dr Khampaoung Phimolsannousith, Chief, Pap Smear Division, Mother and Child
Hospital, Ban Menangoy, Seysetha District, Vientiane; Tel no. +856 20 556 29248

MALAYSIA

Dr Lili Zuryani Marmuji, Principal Assistant Director, Perak State Health Department
Jalan PanglimaBukit Gantang Wahab, Ministry of Health, Perak; Tel no. +605 208 4200
(ext 236); Fax no. +605 255 2821; Email: lilizuryani@prk.moh.gov.my

Dr Shahraniza Bahari, Principal Assistant Director, Public Health Department
Ministry of Health, Level 7, Block E10, Complex E, Federal Government Administrative
Centre, Putrajaya; Tel no. +607 2234431; Fax no. +6013 735 2956
Email: drshahraniza@johr.moh.gov.my

MICRONESIA, FEDERATED STATES OF

Dr Louisa Helgenberger, Immunization Programme Manager, Department of Health
and Social Affairs, National Government, Pohnpei; Tel no. +691 320 2619
Fax no. +691 320 5263; Email: lhelgenberger@fsmhealth.fm

Dr Annamaria Yomai, Immunization Physician, Chuuk State Health Services
Chuuk; Email: ayomai@fsmhelath.fm

MONGOLIA

Dr Gungaa Surenkhand, Deputy Director for Surveillance and Management
National Center for Communicable Diseases, Ministry of Health, Ulaanbaatar
Tel no. +976 11 323111; Fax no. +976 11 320916; Email: g_surenkhand@yahoo.com

Dr Dorj Narangerel, Senior Officer, Communicable Diseases Control
Ministry of Health, Olympic Street-2, Ulaanbaatar-51; Tel no. +976 996 4451
Fax no: +976 11-263 631; Email: naraa61us@yahoo.com

PAPUA NEW GUINEA

Mr George Otto, Manager, National Cancer Services, Department of Health, Waigani
Tel no. +3013837; Fax no. +3013604; Email: gotto27@gmail.com

Ms Ascenate Asi, Programme and Administration Officer, Department of Health
Waigani; Tel no. +7327 2935; Fax no. +325 8995; Email: admin@poncrs.or

PHILIPPINES

Dr Maria Joyce U. Ducusin, Medical Specialist IV, National Center for Disease
Prevention and Control, Department of Health, Manila; Tel no. +632 7329956
Fax no. +632 7117846; Email: juducusin@yahoo.com

Ms Remedios V. Niola, Nurse IV, Programme Manager, Cervical Cancer Programme
National Center for Disease, Prevention and Control, Department of Health, Manila
Tel no. : +632 7322493; Email: niolaremiedos@yahoo.com
Annex 1

**SAMOA**

**Mrs Fuapepe Iese**, National EPI Coordinator, National Health Services  
Private Mail Bag, Apia; Tel no. +685 66692; Email: fuapepef@nbs.gov.ws

**Dr Francis Marumatakimanu**, Consultant Specialist, Obstetrics and Gynecology  
National Health Services, Private Mail Bag, Apia; Tel no. +685 66600  
Fax no. +685 22905; Email: fmatakiman@yahoo.com

**SOLOMON ISLANDS**

**Mr Raymond Mauriasi**, National EPI Coordinator, Child Health Unit  
Ministry of Health and Medical Services, P.O. Box 349, Honiara  
Tel no. +677 28169; Email: rmauriasi@moh.gov.sb

**Mr Gabriel Spencer Meaio**, Cancer Registrar/Cancer Nurse, Ministry of Health and Medical Services, P.O. Box 349, Honiara; Tel no. +677 749 3952; Fax no. +677 24243  
Email: s2_meaio@yahoo.com

**VANUATU**

**Mr Leonard Tabilip**, National EPI Manager, Public Health Department  
Ministry of Health, Port Vila; Tel no. +678 22512; Fax no. +678 27451  
Email: ltabilip@vanuatu.gov.vn

**Mr Arnold Bani**, RH Assistant Coordinato, and HPV Vaccination Coordinator  
Reproductive Health Section, Public Health Department, Ministry of Health  
Port Vila; Tel no. +678 22512; Email: arnoldb@vanuatu.gov.vn

**VIET NAM**

**Dr Le Quang Vinh**, Head, Pathological Department, National Hospital for Obstetrics and Gynecology, 43 Trang Thi Street, Ha Noi; Tel no. +0903421702  
Fax no. +844 382 54638; Email: dr.lequangvinh@yahoo.com

**Dr Nguyen Van Cuong**, Deputy Manager, National EPI, National Institute of Hygiene and Epidemiology, 1 Yersin, Ha Noi; Tel no. +844 39725745; Fax no. +844 8213782  
Email: vancuong@fpt.vn

2. **CONSULTANTS**

**Dr Mark Jit**, Mathematical Modeller, Modelling and Economics Unit, Health Protection Agency, 61 Colindale Avenue, London, United Kingdom; Tel no. +44 208327 7803  
Email: mark.jit@hpta.org.uk

**Dr Ann Levin**, Health Economics, 6414 Hollins Drive, MD 20817, United States of America; Tel: +1 301 807 779; Email: annlevin@verizon.net
Annex 1

TEMPORARY ADVISERS

**Professor Dorota Gertig**, Medical Director, National HPV Vaccination Program Registrar and Victorian Cervical Cytology Registry, **Melbourne**, Australia; Tel no. +613 9250 0377 Fax no. +613 8417 6836; Email dgertig@vcs.org.au

**Ms Mariana Sablan**, Immunization Consultant, National Government Immunization Programme, Department of Health Services, **Chuuk**, Federated States of Micronesia Tel no. +691 320 5263; Email: mcoats@fsmhealth.fm/mariana@opticom.com

3. OBSERVERS

**BILL AND MELINDA GATES FOUNDATION**

**Dr John Yang**, Senior Programme Officer, Global Health Vaccine Delivery Bill and Melinda Gates Foundation, 1551 Eastlake Avenue, **Seattle**, United States of America; Tel no. +1206 295 1507; Fax no. +1206 494 7039 Email: john.yang@gates.foundation.com

**PATH**

**Dr Vivien Tsu**, Associate Director for Reproductive Health, PATH, **Seattle**, United States of America Tel no. +206 285 3500l; Fax no. +206 285 6619; Email: vtsu@path.org

**SOCIETY OF GYNECOLOGIC ONCOLOGIST OF THE PHILIPPINES**

**Dr Gil S. Gonzales**, President, Society of Gynecologic Oncologists of the Philippines Gynecologic Oncology Unit, UST Hospital, Benavides Cancer Institute, **Manila**

**UNIVERSITY OF THE PHILIPPINES**

**Dr Jody Dalmacion**, Pharmaco-epidemiologist, Department of Clinical Epidemiology College of Medicine, University of the Philippines, **Manila**, Philippines Tel no. +632 5254098; Email: jody.dalmacion@gmail.com

**Dr Hilton Lam**, Associate Professor, Department of Clinical Epidemiology College of Medicine, University of the Philippines, **Manila**, Philippines Tel no. +632 5254098; Email:hylam@post.upm.edu.ph
WHO WESTERN PACIFIC REGIONAL OFFICE

Dr John Ehrenberg, Director, Combating Communicable Diseases
World Health Organization Regional Office for the Western Pacific
United Nations Avenue, 1000 Manila, Philippines; Tel no. +632 528-8001
Fax no: +632 521-1036; Email: ehrenbergj@wpro.who.int

Dr Sergey Diorditsa, Team Leader, Expanded Programme on Immunization
World Health Organization Regional Office for the Western Pacific
United Nations Avenue, 1000 Manila, Philippines; Tel no. +632 528-9745
Fax no: +632 521-1036; Email: sergeyd@wpro.who.int

Dr Kimberley Fox, Medical Officer, Expanded Programme on Immunization
World Health Organization Regional Office for the Western Pacific
United Nations Avenue, 1000 Manila, Philippines; Tel no. +632 528-9033
Fax no. +632 521-1036; Email: foxk@wpro.who.int

Dr Md Shafiqul Hossain, Medical Officer, Expanded Programme on Immunization
World Health Organization Regional Office for the Western Pacific
United Nations Avenue, 1000 Manila, Philippines; Tel no. +632 528-9570
Fax no. +632 521-1036; Email: hossains@wpro.who.int

Dr Hai-Rim Shin, Team Leader, Noncommunicable Diseases, World Health
Organization Regional Office for the Western Pacific, United Nations Avenue
1000 Manila, Philippines, Tel no. +632 528-9860; Fax no. +632 521-1036; Email:
shinh@wpro.who.int

Dr Cherian Varghese, Technical Officer, Noncommunicable Diseases, World Health
Organization, Regional Office for the Western Pacific, United Nations Avenue
1000 Manila, Philippines, Tel no. +632 528-9866; Fax no. +632 521-1036
Email: varghesesec@wpro.who.int

Dr Ardi Kaptiningsih, Team Leader, Maternal, Child Health and Nutrition
World Health Organization, Regional Office for the Western Pacific,
United Nations Avenue, 1000 Manila, Philippines; Tel no. +632 528-9876
Fax no. +632 521-1036; Email: kaptiningsih@wpro.who.int

Mr Paul Rogers, Technical Officer, Essential Medicines and Health Technologies
World Health Organization, Regional Office for the Western Pacific
United Nations Avenue, 1000 Manila, Philippines; Tel no. +632 528-9028
Fax no. +632 521-1036; Email: rogersp@wpro.who.int

Dr Wen Chunmei, Technical Officer, Reproductive Health, Maternal Child and
Adolescent Health, WHO Representative Office, Beijing, China
Tel no. +8610 653 27189; Fax no. +8610 653 22359; Email: wenc@wpro.who.int

Dr Sodbayar Demberelsuren, Medical Officer, Expanded Programme on Immunization
WHO Representative Office, Ulaanbaatar, Mongolia; Tel no. +855 23-216610
Fax no. +855 23-216211; Email: demberelsurens@wpro.who.int

Dr John Juliard Go, National Professional Officer, Noncommunicable Diseases
WHO Representative Office, San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila,
Philippines; Tel no. +632 528 9063; Fax no. +632 731 3914; Email: goj@wpro.who.int
Annex 1

Ms Maricel Castro, Expanded Programme on Immunization, WHO Representative Office, San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines; Tel no. +632 338 7479; Fax no. +632 338 8605; Email: castrom@wpro.who.int

Dr Prakash Valiakolleri, Medical Officer, Expanded Programme on Immunization WHO Representative Office, Suva Fiji; Email: valiakollerij@wpro.who.int

Dr Li Dan, Medical Officer, Noncommunicable Diseases, Division of Pacific Technical Support, Office for the South Pacific, Suva, Fiji; Tel no. +679 323 4103 Fax no. +679 3234166; Email: lid@wpro.who.int

WHO HEADQUARTERS

Dr Susan Wang, Medical Officer, New and Under-utilized Vaccines Introduction Expanded Programme on Immunization, Department of Immunization, Vaccines and Biologicals, World Health Organization, Geneva, Switzerland; Tel no. +41 22 791 1606 Fax no. +41 22 791 4193; Email: wangsui@who.int

Dr Nathalie Broutet, Medical Officer, Controlling Sexually Transmitted and Reproductive Tract Infections, Department of Reproductive, Health and Research World Health Organization, Geneva, Switzerland, Tel no. +4122 791 3336 Fax no. +4122 791 4171; Email: broutetn@who.int

UNITED NATIONS POPULATION FUND

Dr Wame Baravilala, Reproductive Health Adviser, United Nations Population Fund Private Mail Bag, Suva, Fiji; Tel no. +679 330 8022; Fax no. +679 331 2785 Email: baravilala@unfpa.org
<table>
<thead>
<tr>
<th>TIME</th>
<th>MONDAY, 28 NOVEMBER 2011</th>
<th>TIME</th>
<th>TUESDAY, 29 NOVEMBER 2011</th>
<th>TIME</th>
<th>WEDNESDAY, 30 NOVEMBER 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800-0830</td>
<td>REGISTRATION</td>
<td>0830-0930</td>
<td>4. Responses to country presentations</td>
<td>0800-0915</td>
<td>7. Applying lessons learnt to future plans</td>
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<tr>
<td>0830-0910</td>
<td>1. Opening remarks</td>
<td></td>
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<td>Country workgroups: action plans to strengthen cervical cancer control, HPV vaccination programmes and/or preparatory work for HPV vaccination over the next year</td>
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<td></td>
<td>• Self-introduction</td>
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<td></td>
<td>• Meeting objectives</td>
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<tr>
<td></td>
<td>• Review meeting objectives, administrative announcements</td>
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<td>0910-0930</td>
<td>GROUP PHOTO AND COFFEE BREAK</td>
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<td>0915-1030</td>
<td>7. Country reports</td>
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<tr>
<td>0930-0950</td>
<td>Comprehensive cervical Cancer control: regional overview</td>
<td>0940-1015</td>
<td>Experience from the Northern Mariana Islands: keys to success in school-based HPV vaccination</td>
<td>1130-1145</td>
<td>9. Conclusions and next steps</td>
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<tr>
<td>0950-1025</td>
<td>HPV Vaccination: technical update and global status</td>
<td>1000-1015</td>
<td>Questions and discussion</td>
<td>1145-1200</td>
<td>Summary of key challenges identified, solutions found, work groups' recommended steps and country action plans to prepare for or improve cervical cancer control and HPV vaccination programmes</td>
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<tr>
<td>1025-1035</td>
<td>HPV Vaccination: regional overview</td>
<td>1015-1030</td>
<td>COFFEE BREAK</td>
<td>1200-1230</td>
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</tr>
<tr>
<td>1050-1125</td>
<td>Questions and discussion</td>
<td>1030-1100</td>
<td>Introduction to principles of economic evaluations for cervical cancer prevention and control programmes</td>
<td>1230-1330</td>
<td></td>
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<tr>
<td>1125-1155</td>
<td>Experience from Australia in monitoring and surveillance for the comprehensive cervical cancer control programme</td>
<td>1100-1130</td>
<td>Costing, affordability and sustainability of cervical cancer prevention and control: introduction of the WHO C4P tool</td>
<td></td>
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</tr>
<tr>
<td>1155-1215</td>
<td>Comprehensive cervical cancer control: technical update and global status</td>
<td>1130-1230</td>
<td>Facilitated discussion: considering economic issues in country priority-setting and planning processes</td>
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<tr>
<td>1215-1315</td>
<td>LUNCH BREAK</td>
<td>1230-1330</td>
<td>LUNCH BREAK</td>
<td>1530-1600</td>
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<tr>
<td>1215-1315</td>
<td>3 Progress in cervical cancer control including HPV vaccination in the Western Pacific Region</td>
<td>1330-1340</td>
<td>6. Workgroups</td>
<td>1530-1600</td>
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<tr>
<td>1315-1410</td>
<td>Group 1: China, Malaysia, Mongolia, the Philippines Discussion</td>
<td>1340-1530</td>
<td>Introduction to workgroups</td>
<td></td>
<td></td>
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<tr>
<td>1410-1550</td>
<td>Group 2: Cooks Islands, FSM, Fiji, Kiribati, Vanuatu Discussion</td>
<td></td>
<td>Workgroup discussions</td>
<td></td>
<td></td>
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<tr>
<td>1605-1630</td>
<td>COFFEE BREAK</td>
<td>1600-1630</td>
<td>Reports from workgroups 1 and 2, discussion</td>
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<td></td>
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<tr>
<td>1630-1730</td>
<td>Group 3: Cambodia, Laos, PNG, Samoa, Solomon Islands, Viet Nam Discussion</td>
<td>1630-1700</td>
<td>Reports from workgroups 3 and 4, discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1730-1745</td>
<td>Discussion</td>
<td>1700-1730</td>
<td>Discussion/conclusions from Day 2 sessions</td>
<td></td>
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</tr>
<tr>
<td>1800</td>
<td>RECEPTION</td>
<td></td>
<td></td>
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<tr>
<td>COUNTRY</td>
<td>YEAR STARTED</td>
<td>RESPONSIBLE UNIT</td>
<td>FINANCING</td>
<td>COMPONENTS</td>
<td>CURRENT STATUS</td>
</tr>
<tr>
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<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CAMBODIA</td>
<td>2011 (Draft)</td>
<td>Preventive Medicine Department, MoH</td>
<td>WHO, HSSP2, and government budget</td>
<td>Policy Strategy and Activities plan</td>
<td>Primary (education and raising awareness); Secondary (early detection, Organized screening programmes, education for health care providers and women in the target group)</td>
</tr>
<tr>
<td>CHINA</td>
<td>2009</td>
<td>All - China Women’s Federation; Management and Organization: CH/MCH Department, Ministry of Health of China; Implementation: National Center for Women and Children’s Health, China CDC</td>
<td>Investment of $32.5 million (205 million RMB) from China’s government, in 2009 and 2010</td>
<td></td>
<td>Free for rural area women aged 35-59 years; 221 rural counties, 30 in East, 78 in central, 113 in West; 7.5 million women in rural areas have been screened by the end of 2010</td>
</tr>
<tr>
<td>LAO PDR</td>
<td></td>
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<tr>
<td>MALAYSIA</td>
<td>1969 (Pap smear screening) 1995 (nationwide programme for women age 20-65 years)</td>
<td>Family Health Development Division, Ministry of Health</td>
<td>Budget allocated RM 3.3 million per year</td>
<td>Health promotion, screening, referral of symptomatic patients, treatment</td>
<td>Ongoing</td>
</tr>
<tr>
<td>MONGOLIA</td>
<td>2008</td>
<td>Cancer research, training and information department, National Cancer Center, Mongolia</td>
<td>Health promotion fund, MoH Millennium Challenge Accounts (MCA), USA</td>
<td>Primary prevention, Early detection, Diagnosis and treatment, palliative care</td>
<td>National programme for prevention and control of NCD (2008-2013); Cancer prevention and control sub-programme (2008-2014); Steering committee on the implementation of CPC sub-programme headed by Vice Minister of Health; National Strategy for Maternal and Newborn’s health (2011-2015); Sub programme on cancer prevention and control (2008-2013)</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>1990 (Philippine Cancer Control Program) 2005 (Cervical Cancer Screening Program)</td>
<td>Multi-agency technical working group (UNFPA, WHO, Women's Health Project II, PhilHealth, Society of Gynecologic Oncologists, Obstetric and Gynecologic Society, Merck Sharp &amp; Dohme, National Center for Pharmaceutical Access &amp; Management, Cervical Cancer Prevention Network Program, PCSO, NCHP, FDA)</td>
<td></td>
<td>Lack of funds, supplies and equipment (pathologist, cytology technician); health workers at RHUs have no proper training on cervical cancer screening; Scale-up of population-based and hospital-based cancer registries</td>
<td>Intensified advocacy and information campaigns and promotion of healthy lifestyle; Improved cervical cancer screening, diagnosis and treatment; Strengthened capability building and health information system</td>
</tr>
</tbody>
</table>
### Table 1. Status of National Cervical Cancer Control Programmes in Countries and Areas of the Western Pacific Region

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>YEAR STARTED</th>
<th>RESPONSIBLE UNIT</th>
<th>FINANCING</th>
<th>COMPONENTS</th>
<th>CURRENT STATUS</th>
</tr>
</thead>
</table>
| PHILIPPINES              | 1990 (Phil Cancer Control Program)  
2005 (Cervical Cancer Screening Program) | Multi-agency technical working group (UNFPA, WHO, Women's Health Project II, PhilHealth, Society of Gynecologic Oncologists, Obstetric and Gynecologic Society, Merck Sharp & Dohme, National Center for Pharmaceutical Access & Management, Cervical Cancer Prevention Network Program, PCSO, NCHP, FDA) | Lack of funds, supplies and equipment, manpower (pathologist, cytology technician); Health workers at RHUs have no proper training on cervical cancer screening; Scale-up of population-based and hospital-based cancer registries | Intensified advocacy and information campaigns and promotion of healthy lifestyle; Improved cervical cancer screening, diagnosis and treatment; Strengthened capability building and health information system |
| VIET NAM                 | 2002 (National Strategy for Cancer Control for all types of cancer)  
2009 (Cervical cancer) | National Cancer Hospital (for all cancers); For cervical cancer: Maternal and Child Health Department, MoH, National Hospital for OBS-GYN | Ministry of Health, PATH | Screening for secondary prevention at sites; Treatment in the two hospitals; National technical guidelines being developed | Pilot projects completed in 2011, national guidelines on secondary prevention approved in May 2011 by MoH |
| COOK ISLANDS             | 1960 | Community health services, hospital health services, outer islands health services and Cook Islands Family Welfare Association | Ministry of Health | Clinicians, lab, hospitals, donors | In progress |
| MICRONESIA, FEDERATED STATES OF | 2005-2006 (planning);  
2007-2012 (implementation) | National Comprehensive Cancer Control Program (NCCC) | CDC funded five-year NCCCNP | Four state plans complement a national plan | |
| FIJI                     | 2008-2010 | GoF [Ministry of Health] | GoF, AusAID, Merck US | Primary prevention (community awareness and health talks, Radio programme); Secondary (no organized screening programme, opportunistic); Tertiary (treatment – (until 2008) Total hysterectomy | Policy was developed but still in draft form; More involvement of Health Promotion Unit; Recurrent Budget + Donations (ACCF); Action plan aligned with MoH four-year strategic plan; Screening included in midwifery and PH curriculum; More PAP smear collection sites (nurses Involved in collection); Cytology screening strengthened; Local doctor(s) trained; Regular visits from overseas gynaecologist to treat women and train doctors |
| KIRIBATI                 | 1999 | Department of Laboratory Services and Reproductive Health Unit | Recurrent budget | | |
### Table 1. Status of National Cervical Cancer Control Programmes in Countries and Areas of the Western Pacific Region

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>YEAR STARTED</th>
<th>RESPONSIBLE UNIT</th>
<th>FINANCING</th>
<th>COMPONENTS</th>
<th>CURRENT STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VANUATU</td>
<td>2007-2008 (feasibility studies); 2009 (screening programme)</td>
<td>Cervical cancer screening programme, RH Section; Public Health Department</td>
<td>Government + AUSAID (2008-2011)</td>
<td>Screening programme using Pap smear; HPV pilot study in 2009 with plans for roll-out in 2012</td>
<td>Screening is ongoing but limited, due to limited resources – funding for logistics, supplies and shortage of all categories of manpower. Therefore expansion to provinces is also limited; Treatment using LLETZ &amp; hysterectomy limited to main referral hospital only</td>
</tr>
<tr>
<td>PAPUA NEW GUINEA</td>
<td></td>
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<td></td>
<td>Opportunistic screening programmes available</td>
<td></td>
</tr>
<tr>
<td>SAMOA</td>
<td></td>
<td>OBGYN</td>
<td>National Health Services</td>
<td>Screening (Paps smears only); Management of abnormal smears</td>
<td></td>
</tr>
<tr>
<td>SOLOMON ISLANDS</td>
<td></td>
<td>NCD</td>
<td></td>
<td>Demonstration</td>
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</table>
TABLE 2. CHALLENGES AND OPPORTUNITIES IN NATIONAL CERVICAL CANCER CONTROL PROGRAMMES IN COUNTRIES AND AREAS OF THE WESTERN PACIFIC REGION

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CHALLENGES</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMBODIA</td>
<td>Lack of awareness in the population; Absence or poor quality of screening programmes; Limited access to health care services; Lack of functional referral systems</td>
<td>Cervical cancer being the most preventable and treatable cancer; Evidence-based interventions for effective early detection and treatment</td>
</tr>
<tr>
<td>CHINA</td>
<td>Lack of cervical cancer screening service providers (especially cytotechnicians); Lack of management funding (especially training); Lack of awareness of target group; Poor coverage in rural areas (covers only 7%)</td>
<td>Government's attention to the programme, hence, more funding; Coverage and target group will be extended</td>
</tr>
<tr>
<td>LAO PDR</td>
<td>Lack of human resource, funds and coordinated screening strategy</td>
<td>Support from WHO for training of health service providers on pap smear and colposcopy</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>Lack of knowledge awareness and wrong perception of target group; Opportunistic activity, Inadequate budget, Not capturing high risk groups; Unsatisfactory smears (1.23% - 2010) of healthcare provider; 60.0% of labs outsourced to non-MOH labs (2010), Inadequate capacity (fund, staff, equipment, lab space); De-centralized services</td>
<td>Availability of government/ private health facilities nationwide; Established health care delivery system; Established organization to oversee the screening programme; Dedicated budget for screening</td>
</tr>
<tr>
<td>MONGOLIA</td>
<td>Lack of awareness among population; No screening programme; Lack of knowledge and skill among service providers; Low capacity of staff (gynecologists, cytologists); Lack of lab supplies for reference Lab</td>
<td>Human resources available at I, II, III level-FGP, OB/GYN, Oncogynecologist; millennium challenge account, USA project on cancer registry and recall system; Clinical guidelines on prevention, early detection, diagnosis, treatment, palliative care approved; Standards on diagnosis, treatment of cancer approved; Plan to start population-based cervical cancer screening on 2012</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>Lack of funds, supplies and equipment, manpower (pathologist, cytology technician); Health workers at RHUs have no proper training on cervical cancer screening; scale-up of population-based and hospital-based cancer registries</td>
<td>Intensified advocacy and information campaigns and promotion of healthy lifestyle; Improved cervical cancer screening, diagnosis and treatment; Strengthened capability building and health information system</td>
</tr>
<tr>
<td>VIET NAM</td>
<td>Insufficient funds; Low awareness of screening ; Low manpower (330 cyto-pathologists in 63 provinces)</td>
<td>Political commitment of MoH; Technical support from international organizations</td>
</tr>
</tbody>
</table>
Table 2. Challenges and Opportunities in National Cervical Cancer Control Programmes in Countries and Areas of the Western Pacific Region

<table>
<thead>
<tr>
<th>Country</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOK ISLANDS</td>
<td>Lack of awareness, human and financial resources; Transportation; Difficulty in attracting non pregnant but sexually active women; Competing priorities (family members before self); Private GPs not involved</td>
<td>Captured audience’ situation during pre- and post natal period; Assistance for screening by CIFWA (NGO); Effective outreach programme; Quick turn around time (TAT) of results; Ease of taking smears through VIA</td>
</tr>
<tr>
<td>FSM</td>
<td>Geographical disparity and cultural practices; Limited supplies, lack of capacity to read paps, delayed TAT (samples send-off island); Treatment services are limited or non-existent in some areas; No patient navigation system in place, support services limited and or non-existent</td>
<td>NCCC Plan guiding the funding; HPV vaccination programme (collaboration among programmes), community-based awareness projects, cancer coalitions; VIA training for HA and other medical staff; Training on treating early stages of cervical cancer, palliative care, pain management, support groups, patient navigation system, etc.; Improved data collection</td>
</tr>
<tr>
<td>FIJI</td>
<td>TAT for reports from lab; slow uptake of free screening at established health facilities; poor understanding of benefits of early screening [resorting to religious/traditional methods]</td>
<td>Strong HPV immunization programme for nine year old. Girls; Good partnerships between government and nongovernmental organizations with campaigns; Early diagnosis; VIA</td>
</tr>
<tr>
<td>KIRIBATI</td>
<td>Getting Political and Government support for National Cervical Screening Policy endorsement; Improving awareness (to see the need and importance of PAP smear test and early detection); Health Education on STI to primary school kits/Parent’s support; Stronger commitment from Health care providers (community level)</td>
<td>Support for equipment, supplies, training (ACCF, Queensland Health Pathology, visiting overseas gynecologists); MDG (cervical cancer prevention programme and action plan aligned with Ministry’s strategic plan)</td>
</tr>
<tr>
<td>PNG</td>
<td>Awareness and education for target populations (early diagnosis); Getting message on social behavioural change as a primary prevention (culturally diverse); Financial support; facilities for screening and treatment</td>
<td>Cancer recognized as a health priority in the current National Health Plan 2011-2020; Establishment of the national cancer service; Collaboration with international donor/development partners for support and develop cancer control programmes in PNG</td>
</tr>
<tr>
<td>SAMOA</td>
<td>People who are not sick do not like to come for Pap smear which is a pelvic exam; Lack of radiotherapy ; Late stages of disease at presentation in most patients; Lack of a proper screening/control programme</td>
<td></td>
</tr>
<tr>
<td>SOLOMON ISLANDS</td>
<td>Lack of knowledge, late presentation, and poor health seeking behavior; Poor pap smear technique and poor laboratory services (specimen sent overseas); Expertise limited to NRH</td>
<td>Cancer registry and school health programme are in place; Midwives trained locally; Support group the first ladies cancer support group</td>
</tr>
<tr>
<td>VANUATU</td>
<td>Resource capacity (funds, manpower, laboratory, etc.); MoH direction not clear in establishing standard guidelines and procedures; Lack of coordination among different players in the programme; Geographic difficulties to reach target groups</td>
<td>Potential for Pap smear to become part of MCH/RH package of services offered at primary care level – but laboratory does not have cytology capacity</td>
</tr>
<tr>
<td>Country</td>
<td>Year of HPV vaccine introduction or campaign</td>
<td>Funding sources for HPV vaccine and operational costs</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>------------------------------------------------------</td>
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<tr>
<td>Cook Islands</td>
<td>2011</td>
<td>Government of Cook Islands and WHO</td>
</tr>
<tr>
<td>Federated States of Micronesia</td>
<td>2009</td>
<td>US CDC</td>
</tr>
<tr>
<td>Fiji</td>
<td>2008</td>
<td>Government of Fiji, AusAID and donated vaccine</td>
</tr>
<tr>
<td>Kiribati</td>
<td>2011</td>
<td>Government of Kiribati, WHO and donated vaccine</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2010</td>
<td>Government of Malaysia</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Plan for 2012</td>
<td>Millenium Challenge Account and donated vaccine</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>Plan for 2012</td>
<td>No confirmed government budget yet, anticipate health partner support for vaccine</td>
</tr>
</tbody>
</table>

**TABLE 3: STATUS OF HPV VACCINATION PROGRAMMES IN COUNTRIES AND AREAS OF THE WESTERN PACIFIC REGION**
<table>
<thead>
<tr>
<th>Country</th>
<th>Comprehensive Cervical Cancer Control</th>
<th>HPV Vaccination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>- Develop national programme for cancer prevention and control</td>
<td>• Assess role of HPV vaccination, especially feasibility and sustainability</td>
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<td>- Organize screening program at HC level and referral hospital level by providing training on VIA test and Pap smear test</td>
<td>• Prepare for HPV vaccine introduction into national immunization program: consider school-based programme with target population in primary school, ages 9-13 years</td>
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<td>- Provide treatment of precancerous lesion</td>
<td>• Plan for HPV vaccine coverage monitoring</td>
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<td></td>
<td>- Strengthening referral system by training cytopathologist, cytotechnicians, gynecologist</td>
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<td></td>
<td>- Strengthening the cancer registry</td>
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<td>China</td>
<td>• Developing the next round of programme plan (2012-2014)</td>
<td>• Government advocacy through analysis of disease burden and cost-benefit</td>
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<td>- screening 30 million rural areas women</td>
<td>• Accelerate the process of domestic HPV vaccine production</td>
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<td>- Carrying out monitoring and evaluation</td>
<td>• Information, education and communications (IEC) project on HPV vaccine</td>
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<td>- strengthening current cervical cancer</td>
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<td>- register system</td>
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<td>- developing M &amp; E plan</td>
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<td>- Improving the quality of screening</td>
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<td>- carrying out more training actions</td>
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<td>- strengthening supervision</td>
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<tr>
<td>Cook Islands</td>
<td>INTRODUCTION OF VIA</td>
<td>• Have already introduced HPV vaccine into routine programme</td>
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<td>• Prepare an information paper for executives</td>
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<td>• MoH approval for introduction of VIA</td>
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<td>• Consult relevant others – clinicians, lab, NGO</td>
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<td>• Draft the policy</td>
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<td>• Community and stake-holders consultation</td>
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<td>• Final draft</td>
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<td>• Endorsement of policy by Parliament</td>
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<td>• Dissemination of policy</td>
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<td></td>
<td>• Training and procurement of equipment via UNFPA</td>
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<td>• Implementation – June 2012</td>
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<tr>
<td>Federated States of Micronesia</td>
<td>C4 PLAN</td>
<td>• Strengthen communication, awareness, and education about vaccine</td>
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<td>• Meet with Cancer programme, Family Health and MCH programme, OBGYN</td>
<td>• Strengthen implementation of HPV vaccination programme by getting commitment from leaders, engaging stakeholders (NGOs, Department of Education and community leaders) in the implementation plan, and strengthening coordination between national and state levels</td>
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<td>• Form an interdisciplinary committee to formulate program policy</td>
<td>• Enhance immunization registry to allow measurement of coverage for target population and to improve data analysis and reporting</td>
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<td>• Review preliminary coverage after each dose and follow-up to increase coverage</td>
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<tr>
<td>Country</td>
<td>Goals and Actions</td>
<td>Additional Actions</td>
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| Fiji                         | • Strengthen or Cervical Cancer Registry and Cervical Cancer Dysplasia Database (1 data entry research assistant, surveillance officer and to collate all HPV records from the 2008/09 campaign)  
  • Adequate laboratory and VIA test supplies (testing), funding for shipment of specimen, training for the Cytotechnicians, nurses and midwives; discuss roll-out and scaling up of VIA based on findings of the pilot; order VIA commodities (Cryo equipment) from UNFPA and also determine logistics of roll out  
  • Adequate supplies of morphine for treatment | • Re-introduce HPV vaccine  
  • Intense micro-planning for school-based vaccination and for health centre-based vaccination for girls not enrolled in school |
| Kiribati                     | To decrease the prevalence (and incidence) of cervical cancer in Kiribati  
  • Finalized national cervical screening policy for endorsement  
  • Seek small grant to support the programme  
  • Strengthen current cervical screening services and create new services  
  • Cost analysis for introduction of VIA on outer islands  
  • Strengthen health promotion programme on public education to support the policy  
  • Ensure continuous supply of consumables  
  • Ensure services are of a consistently high technical quality and sustainable over time  
  • Implementation of the programme (primary prevention of risk factors to cervical cancer development, secondary prevention of cervical cancer, tertiary prevention of cervical cancer)  
  • Ensure an effective recording and recall system is in place  
  • Monitoring and evaluation | • Review the current target group for HPV vaccination (girls ages 9-13 years)  
  • Assess sustainability of vaccination programme and consider potential donors  
  • Review and update HPV vaccination programme implementation plan  
  • Improve monitoring system for HPV vaccination |
| Lao People’s Democratic Republic | The first phase we would to have TA to develop a national policy for cancer prevention and control up to 2012 for all types of cancer  
  The second:  
  • Organize screening programme (VIA, Pap smear)  
  • Training to cytopathologist, cytotechnician  
  • Advocate to minister for support cervical cancer control programme | • After national policy for cancer prevention and control developed, prepare to provide HPV vaccination |
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<th>Annex 6</th>
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| **Malaysia** | • Enhance screening by initiating VIA methods among the indigenous community and residents in remote areas  
• Establishing data collection registry to enable call-recall system and follow-up of abnormal smears  
• Initiate integration with NCD to improve cervical cancer control programme |
|  | • Continue to increase awareness among health care providers, parents, teachers and all women  
• Develop and implement plan to reach girls not in school (especially indigenous groups) and those who missed school-based vaccination  
• Initiate a post-introduction evaluation (need technical guidance and advice) |
| **Mongolia** | • To initiate community based screening  
• To strengthen sub-national VIA capacity  
• To strengthen Reference Lab capacity  
• To include HPV vaccination data into cancer registry |
|  | • Develop a comprehensive action plan for HPV vaccination  
  - plan for pilot introduction in 10% of girls aged 9-13 years by millennium challenge account project  
  - plan logistics including vaccine cold chain, health care worker training and communications  
  - assess financial sustainability for vaccination scale-up  
• Have the national immunization technical advisory group discuss HPV vaccination  
• Develop software for joint cervical cancer and HPV vaccination registry  
• Evaluate the pilot introduction |
| **Philippines** | • Develop Strategic Plan and Situational Assessment to address all components, costing and timelines  
  - conduct a national consultative workshop/write shop  
  - strengthen free cervical screening in 58 hospitals  
  - review existing DoH issuances for possible integration of cervical cancer screening in existing maternal/adolescent/STI-HIV service packages and in hospital laboratory licensing and accreditation |
|  | • Prepare for HPV vaccine introduction by seeking endorsement from the National Immunization Committee and Department of Health Executive Committee |
| **Papua New Guinea** | • Develop screening and treatment guidelines (screening procedure, treatment procedure, referral system, communication/language, awareness)  
• Pre-roll out plan (master trainers, technical advisor, equipment, target group, awareness skills training, awareness materials, selection of location, rollout schedules  
• Cost-effectiveness analysis (resources used, patient associated cost, sustainability, quality, safety) |
### Samoa
- TA
- Develop policies and guidelines
- National Coordination and Management Centre
- VIA and Paps
- Procurement of VIA resources
- Staff capacity building
- Establish a national cancer registry

### Solomon Islands
- Meetings
  - debriefing - NCD, RH health promotion, DPH, 14th. December 2011
  - meets with NCD& RH (agenda- develop draft act plan 1st.Q)
  - meetings with others stakeholders/NGOs/FBO- February 2012- present
- Identifying health workers for training – VIA& cryotherapy (Honiara city council and GP)
- Identify screening points
- Strengthening the reporting system between-NRH cancer registry and the screening points
- Implementation
- Evaluation
- Revisit existing plan. (infrastructure for cancer care centre (NRH))

### Vanuatu
- Continue with PAP smear (appoint full time coordinator for proper planning, implementation, supervision and trainings of nurses and midwives to do pap smear)
- Train 3 midwives on Pap Smear – Australia
- Need technical/financial assistance palliative care training June
- Technical/financial support training for Cancer Registry Officer

### Viet Nam
- Introduce national guidelines on secondary prevention approved in May 2011 by MoH at all levels (6 months)
- Training and retraining for 30 provincial cytologists (3 months)
- TOT for provincial hospital staff for VIA (1 week)

### Activities
- Assess priority of HPV vaccination through consultations with stakeholders in the health and education sectors
- Conduct costing and affordability analysis (sector-wide approach funding)
- Would administer as part of EPI, with target group of girls ages 9-13 years
- Technical HPV training for immunization and reproductive health nurses in Shefa and Tafea followed by introduction of HPV vaccination in these areas in March 2012
- Training of nurses in four other provinces in third quarter 2012
- Post-introduction evaluation of HPV vaccination in Shefa and Tafea in December 2012
- Request technical and financial assistance from WHO for these activities
- Continue HPV vaccination in four pilot districts with donated vaccine (Gardasil)
- Prepare for HPV vaccine introduction by seeking approval from MOH and checking cold chain capacity at all levels