World Cancer Leaders’ Summit

Cancer and Universal Health Coverage

15-17 October 2019
Nur-Sultan, Kazakhstan
Making the national investment case for cervical cancer elimination
Session goals

Learn about the WHO cervical cancer elimination strategy
- The rationale and timetable to launch
- Tools available to develop a costed strategy

Discuss making the national case for investment and taking action
Making the national investment case for cervical cancer elimination

Julie Torode
Director, Special Projects
Union for International Cancer Control

Disclosures: none
WHO Director Generals call to action
21st May 2018
The Growing Inequities of Cervical Cancer Between and within countries

Source: Globocan 2018
Variability in burden and health systems readiness to respond to elimination

Age-standardized (W) rate per 100,000
More than 70 countries sponsored the decision for WHO secretariat to develop a Global Strategy towards the Elimination of Cervical Cancer

Due to be adopted at World Health Assembly in May 2020, with accompanying resolution
The 2020-2030 global strategy

**VISION:** A World Free of Cervical Cancer

**THRESHOLD:** < 4 cases of cervical cancer per 100,000 woman-years

**2030 CONTROL TARGETS**

90% of girls fully vaccinated with HPV vaccine by 15 years of age

70% of women screened with an HPV test at 35 and 45 years of age

90% of women identified with cervical disease receive treatment for precancerous lesions or invasive cancer

SDG 2030: Target 3.4 – 30% reduction in mortality from cervical cancer
Opportunities for leadership in driving equitable access to cervical cancer elimination services

<table>
<thead>
<tr>
<th>Lifecourse approach</th>
<th>Integration of services</th>
<th>Strengthening the workforce</th>
<th>Funding and social protection</th>
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</thead>
</table>
| Childhood vaccine   | Particularly at primary health care level, aligning well with the push of Universal Health Coverage HIV-AIDs; SxRH child and adolescent health; laboratory networks; immunisation; NCDs, data and health information systems | Scaling services needs clear planning to future proof services.  
- Articulation of roles and activities at all levels of the health system  
- Build the case for cancer competent community health workers  
- Develop the role of nursing  
- Incentives to provide the national reach |  
• Social protection for prevention, diagnosis and treatment  
• Showcase the role of surgery and radiotherapy, not just cancer medicines  
• Global fund does support country plans including cx strategies  
• Global financing facility /RH  
• Show the returns in the short and mid-term on the way to elimination |
| Adolescence sexual health education |  |  |  |
| Women, screening and early detection |  |  |  |
| Diagnosis, treatment and palliative care |  |  |  |
  • Building the next generation with cancer health literacy  
  • Driving a mindset change – engagement with the health system for prevention and maintenance of health, NOT just when you are sick |  |  |  |
Eliminating Cervical Cancer

Supporting Governments to Reach Targets

André Ilbawi
Cancer control officer
World Health Organization
Cervical Cancer: Catalyzing Action

Political Commitment → Accelerated action toward clear targets

What to do → How to do it

2005 WHA Cancer resolution
2011 NCD Global Action Plan

'Best buys': effective interventions with cost effectiveness analysis (CEA) ≤ $100 per DALY averted in LMICs
Vaccination against human papillomavirus (2 doses) of 9–13 year old girls
Prevention of cervical cancer by screening women aged 30–49, either through:

Having examined the report on the prevention and control of cancer;

...cost-effective interventions for early detection are available and feasible today, and that the control of cervical cancer will contribute to the attainment of international development goals and targets related to reproductive health;

Treatment of cervical cancer stages I and II with either surgery

(6) to encourage the scientific research necessary to increase knowledge about the burden and causes of human cancer, giving priority to tumours, such as cervical and oral cancer, that have a high incidence in low-resource settings and are amenable to cost-effective interventions;
Formulating Plan

Menu of Options for Operational Plan in Country X

National plans & priorities
- Develop comprehensive plan
- Establish governance
- Set guidelines
- Strengthen cancer registries
- Generate cost/budget
- Invest in research

Delivery of services
- Develop programmes to improve coverage
- Improve referral
- Access to morphine

Commodities & procurement
- Address procurement for HPV test
- Evaluating pricing approach

Communities of practice, training
- Build health workforce for screening, treatment, PC
- Promote participation in CoP

Advocacy & communications
- Engage, identify & coordinate civil society
- Strengthen comms, awareness & outreach

Steps:
1. Analyze situation,
2. Estimate unmet need
3. **Formulate & cost national plan, engage stakeholders**
4. Monitoring, evaluation & research

National plans & priorities
- Develop comprehensive plan
- Allocate budget

Delivery of services
- Strengthen PCP to coverage, particularly vulnerable groups
- Access to morphine

Commodities & procurement
- Strengthen HPV test procurement

Communities of practice, training
- Build health workforce for screening

Advocacy & communications
- Engage, identify & coordinate civil society
- Strengthen comms, awareness & outreach
Two tools are being used to carry out costing and budget impact analyses: C4P and OneHealth

**C4P**
The CxCa Prevention and Costing tool (C4P) was developed by the WHO IVB group specifically to assist low and middle income countries in planning cervical cancer control strategies.
The tool has been built in MS Excel and consists of two independent modules: one for HPV Vaccination, and one for CxCa screening and treatment (incl. tertiary care)

**OHT**
The OneHealth Tool is a software tool designed to inform national strategic health planning in low- and middle-income countries.
The development of the OneHealth tool is overseen by the UN InterAgency Working Group on Costing (IAWG-Costing).
Avenir Health developed the software.

Either tool can be used, depending on in-country availability of data, project management resources, and prior experience with the tools

<table>
<thead>
<tr>
<th>Country</th>
<th>Selected Tool</th>
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<th>Selected Tool</th>
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<tbody>
<tr>
<td>Nigeria</td>
<td>C4P</td>
<td>Morocco</td>
<td>TBD</td>
</tr>
<tr>
<td>Zambia</td>
<td>C4P</td>
<td>Myanmar</td>
<td>OHT</td>
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<tr>
<td>Madagascar</td>
<td>C4P</td>
<td>Mongolia</td>
<td>OHT</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>C4P</td>
<td>Trinidad &amp; Tobago</td>
<td>OHT</td>
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Cervical Cancer Prevention and Control (C4P)

WHO Cervical Cancer Prevention and Control Costing Tool (C4P)

Background

WHO has developed a generic costing and planning tool for cervical cancer prevention and control. The WHO Cervical Cancer Prevention and Control (C4P) tool has been developed specifically to assist low and middle income countries (LMICs) in planning cervical cancer control strategies. The tool has been built in MS Excel and consists of two independent modules:

1. HPV (human papillomavirus) vaccination of 9-13 year old girls.
2. Cervical cancer screening and treatment for women.

OneHealth

The OneHealth Tool is a model to be used for supporting national strategic health planning in low- and middle-income countries. The tool facilitates an assessment of resource needs associated with key strategic activities and their associated costs, with a focus on integrated planning and strengthening health systems.

This model seeks to leverage the most useful components of the different tools that currently exist and is designed in a modular fashion allowing for program specific costing as well as health system component costing. The development of the tool is overseen by an inter-agency group consisting of experts from UN agencies and development institutions (the IAWG-Costing).

www.avenirhealth.org/software-onehealth
Developing an Investment Case

Why invest in cancer?

Provides broader human, social & economic benefits

With... US$2-4 billion

Estimated revenue for bevacizumab US$5-7 bil/yr

We can tackle noncommunicable diseases for an additional
US$ 1.27 per person per year*

*In low- and lower-middle-income countries

Implementing the WHO Best Buys for noncommunicable diseases can generate
US$ 350 B in economic growth between now and 2030

8.2 M lives
We can save 8.2 M lives by 2030 by implementing the WHO Best Buys for noncommunicable diseases

Every US$ 1 invested in the WHO Best Buys to tackle noncommunicable diseases will yield a return of at least US$ 7 by 2030

US$ 1  US$ 7
Making the national investment case for cervical cancer elimination

Karen Canfell
Director, Cancer Research Division, Cancer Council NSW
Adjunct Professor, School of Public Health, University of Sydney
Conjoint Professor, Prince of Wales Clinical School, UNSW Australia

Disclosure: I am a co-PI of an investigator-initiated trial of cervical screening, Compass, run by the VCS Foundation, which is a government-funded not-for-profit charity. The VCS Foundation has received equipment and a funding contribution from Roche Molecular Diagnostics. However neither I nor my institution on my behalf has received funding from industry for this or any other research project.
Making a national investment case

Elements to consider

- Effectiveness
- Cost-effectiveness
- Budget impact/ROI
- Impact on equity
- Risk of inaction
- Broader impact on society

Crucially, for CaCx elimination consider these elements across the ‘90/70/90’ triple-intervention strategy
Australia: On-track to eliminate cervical cancer
Predicted timing 2028 (range 2021-2035)

If no cervical screening in cohorts offered nonavalent vaccines at age 12-13 years

Investment case for vaccination: effectiveness & CE

Free National HPV Vaccination Program, supported by successful health promotion campaigns

90-86-80% for Dose 1-2-3 coverage in girls*

*Females turning 15 years of age in 2017
Risk of inaction on screening

Screening at risk of becoming inefficient and ineffective

High grade abnormality detection rate per 1,000 women screened by age group 2004-2016, Australia

- <20 yrs: 20.3% decrease, p<0.0001
- 20-24 yrs: 46.7% decrease, p<0.0001
- 25-29 yrs: 10.1% decrease, p=0.17
- 30-34 yrs: NS change

Effectiveness, cost-effectiveness & budget impact

Modelling based on international data combined with local information

<table>
<thead>
<tr>
<th></th>
<th>Current practice</th>
<th>HPV: final guidelines*</th>
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<tbody>
<tr>
<td></td>
<td>If HPV vaccination had not been introduced</td>
<td>If HPV vaccination had not been introduced</td>
</tr>
<tr>
<td>Cervical cancer incidence†</td>
<td>6.92</td>
<td>4.73 (-31%)</td>
</tr>
<tr>
<td>Cervical cancer mortality‡</td>
<td>1.80</td>
<td>1.15 (-36%)</td>
</tr>
<tr>
<td>Cervical cancer cases (n)‡</td>
<td>850</td>
<td>584 (-265, -31%)</td>
</tr>
<tr>
<td>Cervical cancer deaths (n)‡</td>
<td>227</td>
<td>145 (-82,-36%)</td>
</tr>
<tr>
<td>Colposcopies (n)‡</td>
<td>85,795</td>
<td>116,889 (31,094; 36%)</td>
</tr>
<tr>
<td>Treatments (n)‡</td>
<td>22,661</td>
<td>23,963 (1302; 6%)</td>
</tr>
<tr>
<td>Annual cost$ of screening programme (AUS$)</td>
<td>$223 million</td>
<td>$182 million (-41 million; -19%)</td>
</tr>
<tr>
<td>Average discounted cost per woman$ (AUS$)</td>
<td>$383</td>
<td>$304</td>
</tr>
<tr>
<td>Average discounted life-year per woman$</td>
<td>21,6219</td>
<td>21,6229</td>
</tr>
</tbody>
</table>

Effectiveness & acceptability

Local trial showing high acceptability of HPV screening

80% participation: High acceptability of HPV screening

Impact on equity

HPV screening offers opportunities to target underscreened women

2-year participation rate:
- 56% for non-Indigenous women
- 34% for Indigenous women

These elements supported a policy change
HPV-based cervical screening and treatment for pre-cancer

1991-2017
Cytology screening
2-yearly

2017-on
HPV screening
5-yearly

82% 5-yearly coverage

*Participation over the 5 years 2012–2016 was 81.9%.

Australian Government: Cancer Series #124.
Implementation: Not without challenges

Even with a well-resourced system

- Implementation challenges for HPV screening:
  - Laboratory workforce transformation
  - Major cycling in test and referral volumes\(^1\)
  - Models for delivery of HPV self-collection
  - Development of a National Cervical Screening Register

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Key steps towards elimination: UHC framework

- Access to broad spectrum vaccine for adolescents
- Access to HPV screening for women
- Access to high quality treatment services for precancer & cancer

Increasing impact and equity

Strengthening of data and monitoring systems is required to ensure successfully delivery of these linked interventions
Making the national investment case for cervical cancer elimination