

PROJECT



REMOVING OBSTACLES TO CERVICAL SCREENING

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*Prepared by:*

**Prof. WOO YIN LING**

*Consultant Obstetrician and Gynaecologist  
University of Malaya*

**Prof. Dato' Dr. ADEEBA KAMARULZAMAN**

*Dean of the Faculty of Medicine  
University of Malaya*

**Assoc. Prof. MARION SAVILLE**

*Director, VCS Pathology  
Melbourne, Australia*

# PROJECT R.O.S.E

A cervical cancer free future for Malaysian women



## CURRENT STATUS

Malaysia has a high incidence of cervical cancer with a relatively high mortality rate due to late presentation.

- ◆ Cervical cancer is one of the top three most common cancers in Malaysian women with four out of five cases occurring in women between 15 to 64 years of age.
- ◆ Worldwide, cervical cancer remains one of the gravest threats to women's lives with one woman dying of cervical cancer every two minutes.

The uptake of Pap smears in Malaysia is low despite campaigns and accessible healthcare facilities.

- ◆ Barriers include 'patient factors' such as fear, embarrassment, inconvenience and 'health system factors' including inadequate screening infrastructure and human resources for conventional pap smear.

The National Health & Morbidity Survey (NHMS) 2011 survey reported only 12.8% of eligible Malaysian women have had a Pap smear within the last 12 months.

Malaysia is internationally recognized and praised for its successful national school based HPV vaccination program which was implemented in 2010.

- ◆ The impact of HPV vaccination on cervical cancer incidence and mortality may not be realized for decades.
- ◆ The population of Malaysia is aging and the increase in women at risk of cervical cancer every year will translate to a growing burden of cancer cases until the fully vaccinated birth cohorts reach midlife.

It is acknowledged that the scale and resource demands for effective cytology-based screening are not feasible for a national Malaysian screening program.

- ◆ In 2013 the World Health Organisation (WHO) recommended HPV testing for cervical cancer screening
- ◆ Many high income countries are transitioning well-established cytology-based programs into HPV testing-based programs. This includes Australia.
- ◆ Malaysia has the opportunity to move rapidly to the more modern and effective HPV primary screening.

## CALL TO ACTION

*Cervical cancer is one of the most preventable and treatable forms of cancer as long as it is prevented with HPV vaccination, detected early and managed effectively.*

*It is paramount to deliver programs that protect adults as well as adolescents.*

*To significantly reduce the incidence of cervical cancer and make it a rare disease in Malaysia, an organized cervical screening program that improves coverage and effectiveness is urgently required.*

*In June 2018, Dr Tedros Adhanom Ghebreyesus, WHO Director-General issued a 'call for coordinated action globally to eliminate cervical cancer'.*

*The World Bank has endorsed HPV vaccination and HPV-based cervical screening as 'best buys' for cancer control in LMICs.*

**Malaysia has the opportunity to lead the South East Asia region in eliminating cervical cancer through implementation of an organised self-screening program, building on its successful national school-based HPV vaccination program**

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## A PROVEN, ECONOMICALLY SUSTAINABLE AND EVIDENCE-BASED PROGRAM

Cervical screening with HPV testing is a scientifically validated and globally accepted intervention for identifying women at the pre-cancerous stage and enabling early treatment for cancer prevention.

A Malaysian Integrated Cervical Cancer Control Program of high-coverage, simple screening in 30 to 60 year old women, in addition to adolescent HPV vaccination, would not only more rapidly reduce the burden and cost of treating cervical cancer, but would serve as a critical model for the region.

The proposed implementation model is being proven through a successful and innovative collaborative trial undertaken with global experts in the field – PROJECT ROSE – Removing Obstacles in Cervical Screening. Key components are:

- ◆ Self-sampling of women.
- ◆ HPV DNA testing.
- ◆ Digital e-Health platform for high connectivity to participants and real time reporting.

PROJECT ROSE is informing the road-map for implementation and scale-up of a phased, feasible, cost-effective and sustainable national cervical cancer screening program which complements the very successful HPV vaccination program in Malaysia.

- ◆ In the ROSE pilot, interim results show that ~30% of women tested had never been previously screened.
- ◆ The pilot is leveraging services provided by government-run community clinics (klinik kesihatan).
- ◆ Nurses are actively embracing mobile e-Health technology.
- ◆ Screening results are being made available to women via a message to their mobile phone within one day, usually within a couple of hours.
- ◆ The trial is being led by the University of Malaya, the Ministry of Health, in partnership with VCS Limited.

**Malaysia can be the first country in South East Asia to implement a population wide, highly effective cervical cancer screening program, in conjunction with the HPV vaccination program, establishing leadership to other countries in our region**

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A Malaysian Integrated Cervical Cancer Control Program will incorporate an economic model that will sustain the program and not burden the end-user/payer in terms of human resources and financial costs.

- ◆ Budget will leverage both government and private investment (health insurance companies and large employers) and be supported and coordinated using the eHealth platform, customized for population health management in Malaysia.

A key outcome will be the development of in-country resource-stratified guidelines for program management.

The eHealth platform will provide a rich source of data to enable evaluation of the performance of the screening program in Malaysia.

CURRENT MALAYSIA PAP SMEAR PROGRAM	SELF-SCREENING PILOT PROGRAM	CUSTOMISED E-HEALTH SOLUTION
Opportunistic	Self-acquired screening test via swab instruments	Scalable with population growth and configurable to new testing and treatment schedules (i.e., HIV and Hepatitis C)
Requires a pelvic examination by health care professional – a known barrier to screening uptake	HPV screening for the highest test sensitivity	Promotes a framework for reporting of full program information to Government (positivity rates, follow up rates etc.)
Suboptimal uptake of screening	Can be effective with two to five tests in a lifetime	Leverages mobile technology for high connectivity ensuring women are not lost for follow up
No formal monitoring or recall system for positive results	Health portfolio budget savings over the long term	
Will require up to 15 tests in a woman's lifetime	Backed by an advanced e-Health platform (registry) to provide real-time information quickly, accurately and securely within an Azure environment	
Health costs forecast to increase in the next 10 to 20 years		

**We are excited about the  
prospect of a breakthrough  
in cervical cancer control  
in Malaysia**

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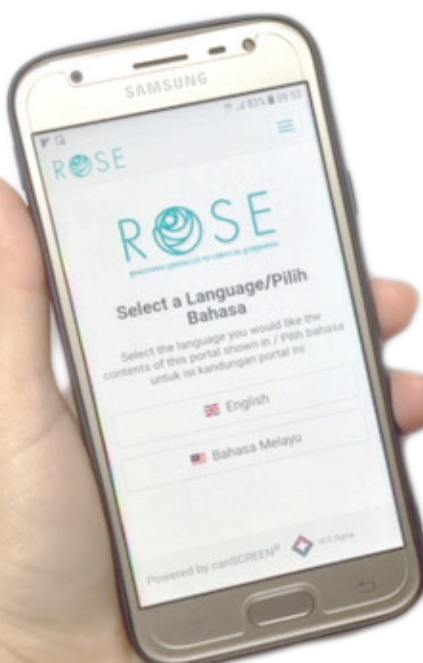
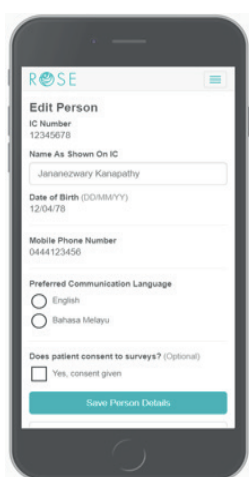
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## PROJECT R.O.S.E PILOT



E-HEALTH PORTAL  
&  
KLINIK  
KESIHATAN



# ***A Cervical Cancer Free Future for Malaysian Women***



*For more information please email:*

**[pilotprojectrose@gmail.com](mailto:pilotprojectrose@gmail.com)**

*or the principle investigator: Prof. Woo Yin Ling*

**[ylwoo@um.edu.my](mailto:ylwoo@um.edu.my)**



**ProjectROSE.my**