



HPV Vaccination Program

Cross-country learning and best practice



Singapore's experience on integrated HPV vaccine delivery

Vasuki Utravathy

Director, School Health & Outreach

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Overview

- Overview:
 - Singapore, Health Promotion Board
 - HPV vaccination schedule
- Challenges
- Interventions

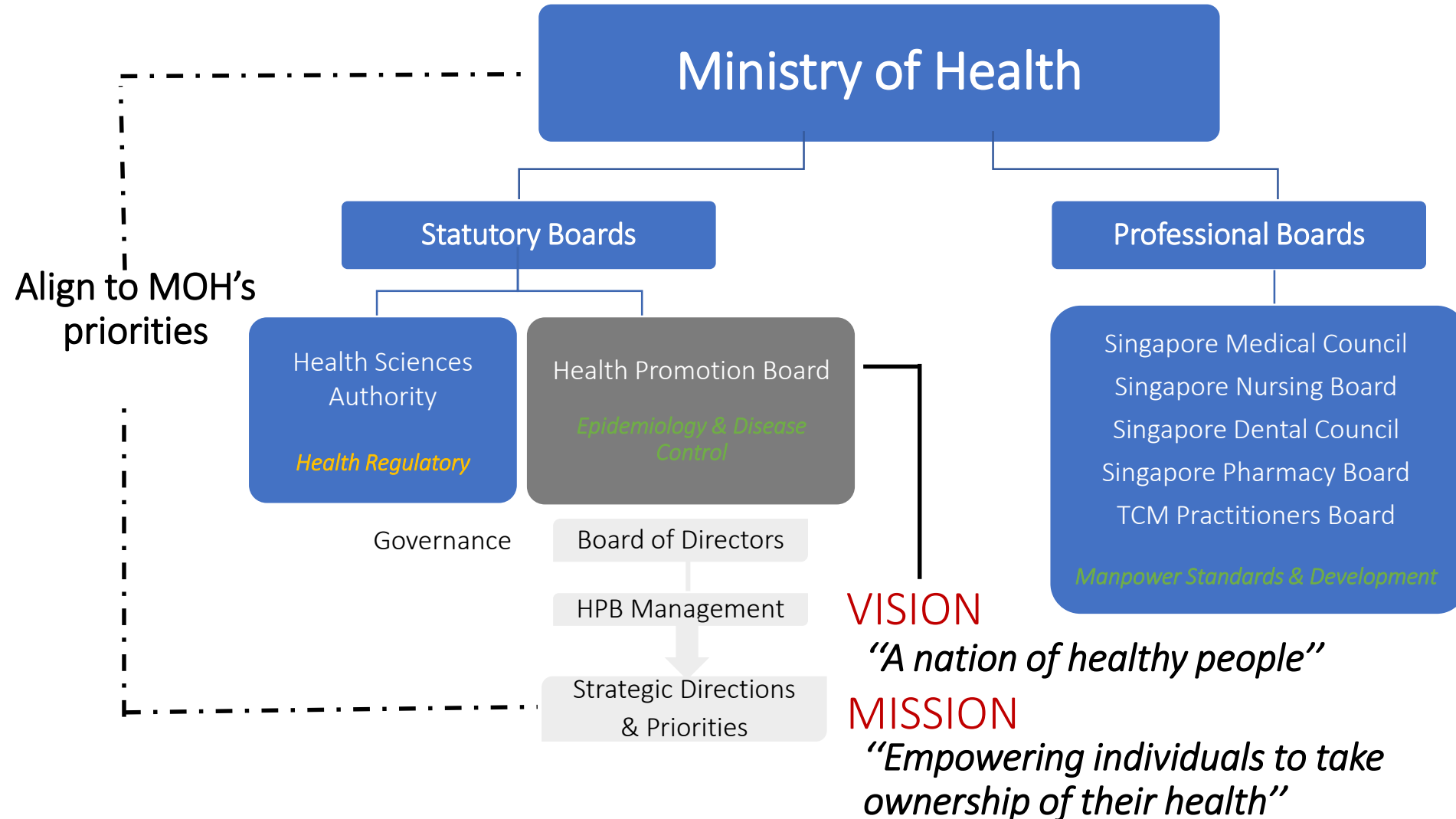


About Singapore

- Total land area of 728.3 square kilometers
- About 260K are females aged 9 – 26 years old (7% of resident population)
- 136 secondary schools (where school-based HPV vaccination) is implemented for Secondary 1 female students (aged 12 – 13 years)



HPB was established in 2001 to drive health promotion & disease prevention efforts



Challenge: Lack of knowledge on HPV vaccination back in 2015

- 9.8% reported uptake among 15- to 22-year-old in 2015.
- Among the unvaccinated participants
 - 96 (41.7%) had no intention to receive HPV vaccination
 - 62 (24.3%) of them cited lack of information as a major barrier to HPV vaccination.
- Knowledge of cervical cancer and HPV vaccination was low.
 - median score of 7 against score of 14
- Significant association between HPV vaccination uptake and the source from which they first heard about the vaccine ($p = 0.007$).
 - Respondents who had heard about HPV vaccination from relatives and friends were likely to get their HPV vaccination.

Taking a life course approach towards cervical cancer

HPV vaccinations for young females to prevent cervical cancer

School based vaccination introduced 2019
(9 to 17 yo females)



child



teenager

Community based vaccination
(18 – 26 yo females)



young adult

HPV cervical cancer screening
(25yo onwards)
10th leading cause of cancer for females



young adult

Primary Prevention

Secondary Prevention

Coverage: ~90% (Sec 1s i.e., 13-year-old)

51.8%* (18 to 26-year-old)

*Average uptake for 9 birth cohorts (as of end Jun 2024)

Intervention: Inclusion in national vaccination schedules

National Childhood Immunisation Schedule (NCIS) (from birth to age 17 years, effective from 1 November 2020)

Vaccine	Birth	2 months	4 months	6 months	12 months	15 months	18 months	2-4 years	5-9 years	10-11 years	12-13 years	13-14 years	15-17 years	
Bacillus Calmette-Guérin (BCG)	D1													
Hepatitis B (HepB)	D1	D2		D3										
Diphtheria, tetanus and acellular pertussis (paediatric) (DTaP)		D1	D2	D3			B1							
Tetanus, reduced diphtheria and acellular pertussis (Tdap)										B2				
Inactivated poliovirus (IPV)		D1	D2	D3			B1			B2				
<i>Haemophilus influenzae</i> type b (Hib)		D1	D2	D3			B1							
Pneumococcal conjugate (PCV10 or PCV13)			D1	D2	B1									
Pneumococcal polysaccharide (PPSV23)								One or two doses for children and adolescents age 2-17 years with specific medical condition or indication.						
Measles, mumps and rubella (MMR)					D1	D2								
Varicella (VAR)					D1	D2								
Human papillomavirus (HPV2)											D1 (females)	D2 (females)		
Influenza (INF)				Annual vaccination or per season for <u>all children</u> age 6 months to <5 years (6-59 months).					Annual vaccination or per season for children and adolescents age 5-17 years with specific medical condition or indication.					

Recommended ages and doses for all children

Recommended for children with specific medical conditions or indications



Footnotes:

- D1, D2, D3: Dose 1, dose 2, dose 3
- B1, B2: Booster 1, booster 2


• 10-11, 12-13, 13-14 years: Primary 5, Secondary 1, Secondary 2 (Tdap, IPV, HPV (for females) and MMR (as catch-up) vaccines are provided as part of Health Promotion Board's school-based vaccination programme)

- HepB: Doses 2 and 3 are recommended to be given as part of the 6-in-1 vaccine at 2 and 6 months, respectively
- MMR: Only the dose 2 is recommended to be given as part of the MMRV vaccine

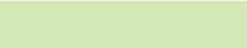


Intervention: Inclusion in national vaccination schedules

National Adult Immunisation Schedule (NAIS)

(for age 18 years or older)



Vaccine	18-26 years	27-64 years	≥ 65 years
Influenza (INF)	1 dose annually or per season		1 dose annually or per season
Pneumococcal conjugate (PCV13)	1 dose		
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses (depending on indication)		1 dose
Tetanus, reduced diphtheria and acellular pertussis (Tdap)	1 dose during each pregnancy		
Human papillomavirus (HPV2)	3 doses (females)		
Hepatitis B (HepB)	3 doses		
Measles, mumps and rubella (MMR)	2 doses		
Varicella (VAR)	2 doses		

-  Recommended for adults who meet age requirement
-  Recommended for adults with specific medical condition or indication
-  Recommended for adults who have not been previously vaccinated, or lack evidence of past infection or immunity

Intervention: Letters informing eligible 18 to 26-year-old females about HPV vaccination subsidies to boost take-up

January 2022

[Name]
[BLK] [STREET]
#[FLOOR] – [UNIT] [BUILDING]
SINGAPORE [POSTAL]



Dear Ms/Mdm,

Recommendations and Subsidies for Human Papillomavirus (HPV) Vaccination

Cervical cancer is the 10th most common cancer affecting women in Singapore despite being one of the most preventable. The human papillomavirus (HPV) vaccination prevents specific types of HPV infections that may lead to cervical cancer.

In Singapore, HPV vaccination is recommended for all females aged 9 to 26 years old. Since 2019, the Health Promotion Board has been administering HPV vaccinations in secondary schools. You are receiving this letter because the school-based HPV vaccination programme was not available during your secondary school years and you are still within the recommended age group.

The HPV vaccination is available at Community Health Assist Scheme (CHAS) General Practitioner (GP) clinics and polyclinics, with subsidies available for eligible female Singaporeans. Eligible Singapore Citizens and Permanent Residents can also use MediSave to further offset the remaining co-payment. This will make it more accessible and affordable for you to complete your HPV vaccinations according to the recommended schedule.

To help defray the cost for eligible females aged 18 to 26 years old with a valid CHAS Orange or Blue card, Singapore Cancer Society (SCS) together with Temasek Foundation is rolling out a one-year HPV Immunisation Programme. Under the programme, Temasek Foundation will fully fund the remaining co-payment of the HPV vaccination at participating CHAS GP clinics for eligible CHAS Orange and Blue cardholders. Singapore Cancer Society will administer the programme.

For more information, please refer to the Frequently Asked Questions. If you have any further queries on the HPV Immunisation Programme for CHAS Orange or Blue cardholders, you may scan the QR code below or contact SCS at communityhealth@singaporecancersociety.org.sg or 1800 727 333.



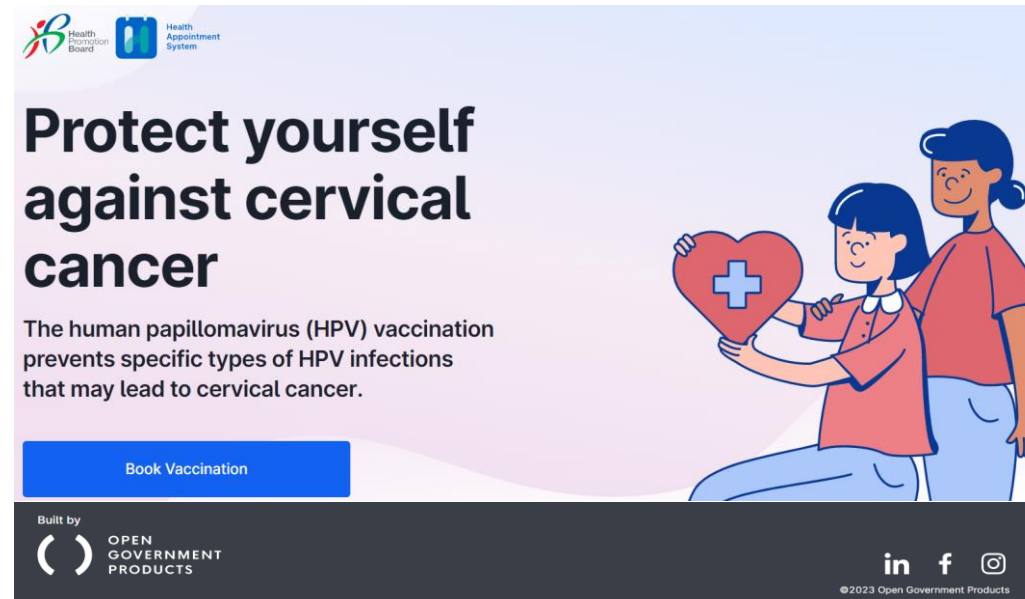
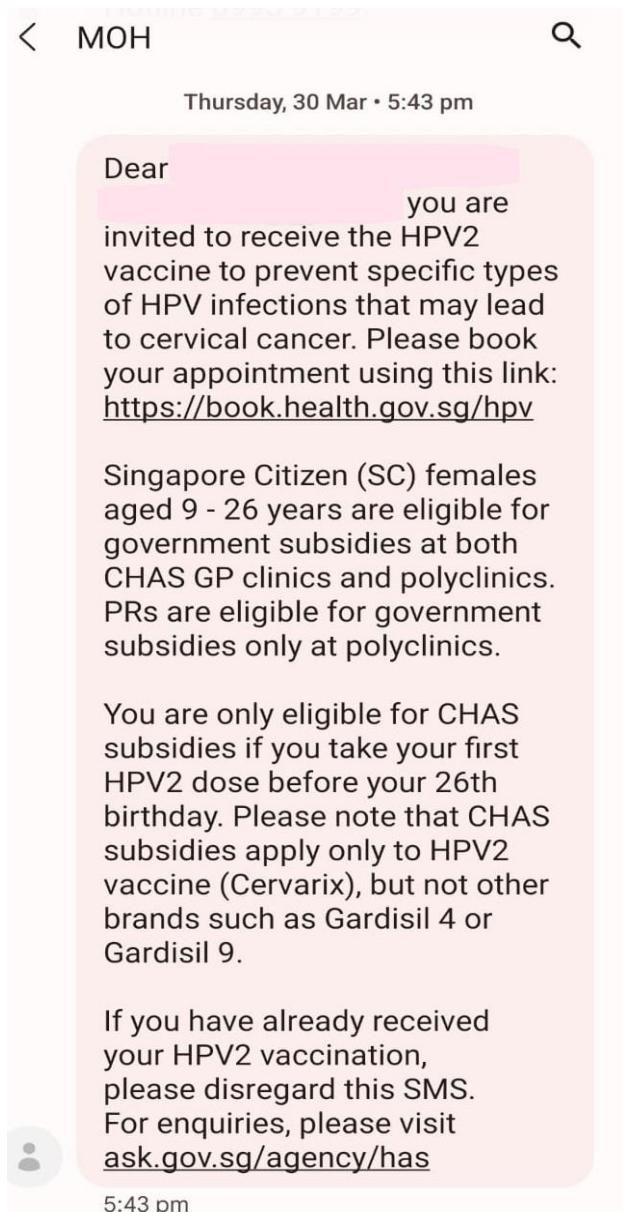
www.singaporecancersociety.org.sg

Stay one step ahead with vaccinations and protect yourself from vaccine-preventable diseases.

Communicable Diseases, Preventive Health Programmes
Health Promotion Board

- The targeted approach was implemented in 2022 instead of mass campaign since the target population comprise of only 8 birth cohorts and females.
- Shared on financial enablers available
 - Subsidised at CHAS GP clinics and polyclinics
 - For Blue/Orange CHAS card holders fully subsidised at participating clinic (Temasek Foundation-Singapore Cancer Society)

Intervention: SMS nudges to book vaccination appointment



- The catch-up cohort was nudged vis SMS to close the last mile via booking of vaccination appointment.
- The Health Appointment System was co-developed with the Open Government Products.
- ~170K SMSes were sent to the catch-up cohort.

Interventions: Examples of other platforms (ongoing/upcoming)

- Reaching out via Institutes of Higher Learning (e.g., print resources)
- Social media platforms (e.g., social posts, inclusion of Health Appointment System in H365)



Health Promotion Board, Singapore

Protect yourself and your loved ones from falling seriously ill from vaccine-preventable diseases. With the Health Appointment System (HAS), it's easy to book an appointment for recommended vaccinations. So don't wait, take action today!

Visit go.gov.sg/has to book a pneumococcal, influenza (flu) or human papillomavirus (HPV) vaccination appointment now.

You can also learn more about nationally-recommended vaccinations at vaccinesprotect.gov.sg

#hpbsg



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**PREVENT WHAT'S
PREVENTABLE WITH
VACCINATION**

Get vaccinated

Book your vaccination appointment



**People's Association
Programmes**

Explore CC and RC courses, activities and interest groups

Thank You