

Community Care Fund Cervical Cancer Vaccination Pilot Scheme Evaluation Report

Purpose

This paper reports the results of the evaluation of the Cervical Cancer Vaccination Pilot Scheme under the assistance programme of the Community Care Fund (CCF).

Background

2. The Commission on Poverty (CoP) approved a budget of \$98.75 million under the CCF at its meeting on 13 June 2016, for the launch of the 3-year “Free Cervical Cancer Vaccination Pilot Scheme” to provide cervical cancer vaccination to eligible teenage girls from low-income families. The Family Planning Association of Hong Kong (FPAHK) was the implementing agent of the Pilot Scheme and was responsible for the vaccination service. The Pilot Scheme was rolled out on 3 October 2016 and was originally planned to be completed in September 2019 with March 2019 as the cut-off day for new applications.

3. The Pilot Scheme targeted at teenage girls from low-income families as stated below:

- (i) girls aged nine to 18 who were receiving the Comprehensive Social Security Assistance (CSSA); and
- (ii) female students aged nine or above who were receiving full grant under the School Textbook Assistance Scheme (STAS).

4. The CoP approved the expansion of target beneficiaries of the Pilot Scheme at its meeting on 17 November 2017 to provide vaccination protection to more girls. Since 3 April 2018, the Pilot Scheme had been expanded to cover the following target groups:

- (i) girls aged nine to 18 who were from households benefiting from the Working Family Allowance Scheme; and
- (ii) female students aged nine or above who were receiving half grant under the STAS.

5. Except for female students receiving half grant under the STAS as mentioned in paragraph 4(ii) above who were required to pay \$100 for each dose of

vaccine, all eligible teenage girls (i.e. those mentioned in paragraphs 3 and 4(i) above) were provided with free cervical cancer vaccination. The programme was then renamed as the Cervical Cancer Vaccination Pilot Scheme. The total provision of the Pilot Scheme was about \$98.75 million (including an administrative fee of about \$4.7 million), and about 31 100 teenage girls were expected to receive the vaccination.

6. The Pilot Scheme procured the vaccine required, by way of tender, after making reference to the recommendations of the Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on AIDS and Sexually Transmitted Infections. The 9-valent vaccine used covers Human Papillomavirus (HPV) 6, 11, 16, 18, 31, 33, 45, 52 and 58, which are high-risk HPV genotypes.

7. It was stated in the Chief Executive's 2018 Policy Address that according to the recommendations of the Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on AIDS and Sexually Transmitted Infections, the Government would introduce free HPV vaccination to school girls of particular age groups as a public health strategy for prevention of cervical cancer. In this connection, the Department of Health (DH) has incorporated HPV vaccination into the Hong Kong Childhood Immunisation Programme (HKCIP). Starting from the 2019/20 school year, the first dose of HPV vaccine will be given to Primary 5 school girls while the second dose will be given when they are at Primary 6. To allow sufficient time for eligible teenage girls (girls at Primary 6 to 18-year-olds in particular) to receive vaccination service under the Pilot Scheme, as well as to enable a smooth transition between the Pilot Scheme and DH's new programme, the CoP approved at its meeting on 15 January 2019 to extend the cut-off date for new cases under the Pilot Scheme. The extension allowed eligible applicants to submit applications to FPAHK and receive the first dose of vaccine before 30 September 2019, and complete the vaccination by receiving the second and/or third dose by the end of June 2020.

8. Due to the COVID-19 outbreak, some eligible applicants were not able to receive the second or third dose of vaccine by the completion date. The CoP approved on 30 June 2020 to extend the deadline for receiving the second or third dose of vaccine under the Pilot Scheme for another three months from June 2020 to September 2020. Considering the vaccine manufacturer's instructions that the whole course of vaccination must be completed within one year, or the anticipated immunisation will be lost, further extension of the vaccination service is therefore infeasible.

Implementation of Pilot Scheme

9. FPAHK started to accept applications and provide vaccination to eligible applicants in October 2016. Eligible teenage girls were arranged to complete application formalities and receive medical assessments and vaccination services at the

Youth Health Care Centres (YHCCs) of FPAHK in Wan Chai, Mong Kok and Kwai Fong.

10. FPAHK displayed promotional posters and leaflets at their three YHCCs, six FPAHK Clinics and six Women's Clubs. Through the coordination of the Food and Health Bureau (FHB), FPAHK sent the promotional posters and leaflets to various government departments, social service units and schools for distribution. The Information, Education & Communication Department and Fieldwork Team of FPAHK promoted the Pilot Scheme and the related sex education information to target groups and their parents at school and community levels respectively. In addition, FPAHK specifically set up a hotline and a programme webpage and produced promotional videos to facilitate public understanding on the programme and enrolment details, with an aim to effectively convey programme information to eligible beneficiary groups.

11. FPAHK processed 29 115 eligible applications and provided a total of 67 709 doses of vaccines to 29 032 beneficiaries. The disbursements involved were about \$74.44 million, with a related administrative fee of about \$4.67 million (accounting for 5% of the original budget of disbursements). The remaining balance was about \$19.64 million, which was within the original budget.

Evaluation of Pilot Scheme

12. Upon completion of the Pilot Scheme on 30 September 2020, FHB and FPAHK conducted an evaluation of the effectiveness of the Pilot Scheme. The effectiveness of the Pilot Scheme had been evaluated based on the following indicators:

- (a) number of beneficiaries and participation rate;
- (b) public enquiries and programme promotion; and
- (c) beneficiaries' and parents' satisfaction with the programme.

Findings

13. FHB and FPAHK have analysed the information and statistics as at 30 September 2020 based on the evaluation indicators mentioned in paragraph 12 above. The details are set out in the ensuing paragraphs.

(a) Number of beneficiaries and participation rate

14. FPAHK processed 29 115 eligible applications. Among them, a total of 29 032 beneficiaries started and received the vaccination course. Based on the original estimation that about 31 100 teenage girls could receive the vaccination, the overall participation rate was 93%. Among the 83 eligible applicants who did not start the vaccination course, 59 withdrew their applications or refused to receive

vaccination due to personal reasons, and 24 were found not suitable for receiving vaccination due to medical reasons (see details at [Appendix 1](#)).

15. Among the 29 032 beneficiaries who started and received the vaccination course, 111 (or 0.38%) reported adverse reactions. Since most of these reactions were mild ones such as fever (or 49%), most beneficiaries chose to continue the vaccination course (see details at [Appendix 2](#)).

16. In the end, a total of 28 760 persons completed the entire course of vaccination, with a completion rate of 99%. Among them, students receiving full grant under the STAS (17 178 persons) accounted for 60% of the total number of beneficiaries, followed by the CSSA recipients (6 301 persons), which accounted for 22%. Students receiving half grant of the STAS (4 952 persons) accounted for 17%, and members of households benefiting from the Working Family Allowance Scheme (329 persons) only accounted for 1%. In addition, the age group with the highest number of beneficiaries was the 11-year-olds, totalling 3 410 (or 12%). There were also more than 3 000 beneficiaries in each of the age groups of nine to 12-years-olds. Separately, most of them were living in the New Territories (14 715 persons or 52%) (see details at [Appendix 3](#)). Approximately two-thirds of the beneficiaries attended consultations at the YHCCs in their district of residence (18 806 persons or 65%), and 9 954 beneficiaries chose to attend cross-district consultations.

17. Starting from January 2020, owing to the outbreak of COVID-19, though FPAHK remained open for service, they reported difficulties in arranging for the eligible teenage girls to receive the second or third dose of vaccine. As at the original completion date (i.e. end of March 2020) of the Pilot Scheme, there were 314 beneficiaries still being unable or did not want to complete the course of vaccination due to the outbreak of COVID-19. In order to allow all eligible teenage girls to receive the vaccination by the completion deadline of the Pilot Scheme, the CoP approved on 30 June 2020 for FPAHK to continue to administer the remaining doses until the end of September 2020.

18. During the extension period of the programme, i.e. April to September 2020, the staff of FPAHK strived to keep in touch with the affected beneficiaries and their parents. Eventually, 120 beneficiaries completed the vaccination course, 179 beneficiaries did not receive the last dose of vaccine, while the other 15 persons could not be contacted. As a result, the total number of beneficiaries who were unable to complete the vaccination course or unable to follow up had reached 274, accounting for 0.94% of the 29 032 beneficiaries (see details at [Appendix 4](#)).

(b) Public enquiries and programme promotion

19. Since the launch of the Pilot Scheme in October 2016, the public response was very enthusiastic, and a large number of appointment calls were received by the three YHCCs. The hotline had also handled 23 339 enquiries. In order to enhance the publicity and education in all districts of Hong Kong, the Information, Education

& Communication Department and Fieldwork Team of FPAHK organised a total of 120 school or public education seminars, and 257 community promotion activities. The number of teenage girls/ students/ parents/ guardians who attended school education seminars and members of the public who attended/ participated in the activities were 10 849 and 14 855 respectively (see details at **Appendix 5**).

(c) Beneficiaries' and parents' satisfaction with the programme

20. When the beneficiaries received the last dose of vaccine, the medical staff gauged feedbacks from the beneficiaries about their satisfaction with the Pilot Scheme. A total of 22 058 beneficiaries (or 77%) were satisfied with the programme, 6 701 (or 23%) were very satisfied, and only 1 person had no opinion. Moreover, many parents were grateful that the Pilot Scheme allowed their daughters to be protected by the vaccine without having them to bear the high cost. Under the Pilot Scheme, there were 18 795 beneficiaries (or 65%) in the age groups of 9 to 14. It showed that the public had gradually recognised the importance of allowing their daughters to receive HPV vaccine as early as possible.

Other relevant information

Comments from implementing agent

21. The staff of FPAHK encountered various problems when they contacted the applicants or the parents to arrange appointments for processing the applications. Many beneficiaries had extra-curricular activities or interest classes and remedial classes, and the parents also had their own work commitment or housework schedule. So, they tended to choose certain specific time slots. Even during school holidays, many beneficiaries still found it difficult to attend an appointment in the daytime due to school activities, study tours or remedial classes.

22. Young beneficiaries were more likely to express fear and resistance to vaccination. Therefore, nurses at the centres worked in pairs or gave the applicants a longer time to relax and receive the vaccine. In general, beneficiaries accepted the vaccination and understood its benefits for them.

Conclusion

23. The Pilot Scheme achieved its objectives effectively. It not only provided HPV vaccination service and related health information for eligible teenage girls from low-income families, but also raised the public's acceptability of the HPV vaccines, which will be conducive to the implementation of universal HPV vaccination for students by the Government. DH has already incorporated the HPV vaccine into the HKCIP as one of the public health strategies for prevention of cervical cancer. The Government has been providing free HPV vaccination to Primary 5 school girls starting from the second term of the 2019/20 school year. School Immunisation

Teams of the DH will visit schools to provide group vaccination service to ensure a high level of coverage.

Food and Health Bureau

March 2021

Appendix 1

Reasons assessed by medical staff as not suitable for receiving vaccination

Reasons for being not suitable for vaccination (can select more than one option as shown below)	No. of counts*
1) Allergic to yeast or any component of the vaccine	10
2) Being afraid of or refusing to receive vaccination	6
3) Low blood platelet count or coagulation disorder	4
4) Taking immunosuppressive drugs	3
5) Other factors that weaken the immune system	3
Total	26

* A total of **24** applicants were assessed by medical staff as not suitable for vaccination.

Appendix 2

Cases of reactions after vaccination reported by beneficiaries

Cases of reactions after vaccination reported by beneficiaries (can select more than one option as shown below)	No. of counts*
1) Fever	65
2) Dizziness	23
3) Allergy	14
4) Headache	9
5) Injection-site reactions (including redness, pain, swelling, itching, bruising)	5
6) Nausea	5
7) Faint	4
8) Fatigue	4
9) Very rare side effects	3
Total	132 *

* A total of **111** beneficiaries reported reactions after vaccination, accounting for 0.38% of the total number of persons received vaccination (i.e. 29 032).

Appendix 3

**Profile of the 28 760 teenage girls
who had completed the entire vaccination course**

Basic categorisation		No. of persons (% of the category)
1	<i>Beneficiary groups</i>	
	Students receiving full grant under STAS	17 178 (60%)
	Recipients of CSSA	6 301 (22%)
	Students receiving half grant under STAS ¹	4 952 (17%)
	Members of households benefiting from the Working Family Allowance Scheme	329 (1%)
2	<i>Females who have received the required doses of the entire vaccination course</i>	
	One dose (Beneficiaries had received part of the vaccination course outside the Pilot Scheme)	43 (-)
	Two doses	18 783 (65%)
	Three doses	9 934 (35%)
3	<i>Age (As of the date of first vaccination)</i>	
	9	3 311 (12%)
	10	3 402 (12%)
	11	3 410 (12%)
	12	3 166 (11%)
	13	2 908 (10%)
	14	2 598 (9%)
	15	2 492 (9%)
	16	2 575 (9%)
	17	2 861 (10%)
	18	1 597 (5%)
19 or above	440 (1%)	
4	<i>Areas of residence</i>	
	New Territories:	14 715 (52%)
	Kwai Tsing District	3 074 (11%)
	Yuen Long District	2 469 (9%)
	Shatin District	2 238 (8%)
	Northern District	1 836 (6%)
	Tuen Mun District	1 794 (6%)
	Tsuen Wan District	1 022 (4%)
	Sai Kung District	926 (3%)

¹ Required to pay \$100 for each dose of vaccine.

Basic categorisation		No. of persons (% of the category)
	Tai Po District	871 (3%)
	Islands District	485 (2%)
	Kowloon:	11 367 (39%)
	Kwun Tong District	4 423 (15%)
	Sham Shui Po District	2 273 (8%)
	Wong Tai Sin District	2 097 (7%)
	Kowloon City District	1 544 (5%)
	Yau Tsim Mong District	1 030 (4%)
	Hong Kong Island:	2 379 (8%)
	Eastern District	1 279 (4%)
	Southern District	643 (2%)
	Central & Western District	337 (1%)
	Wanchai District	120 (1%)
	Mainland China:	299 (1%)

**Main reasons for the teenage girls
being unable to complete the vaccination course or follow up**

Main reasons for the teenage girls being unable to complete the vaccination course or follow up	No. of persons	
	as at March 2020	as at September 2020
1) Serious post-vaccination reactions and not suitable to continue the vaccination course	30	30
2) Afraid of side effects	15	15
3) Refusing to continue due to personal reasons (including the impact of COVID-19)	24	203 (increased by 179)
4) Loss of contact	10	25 (increased by 15)
5) Other reasons	1	1
Total	80	274 (increased by 194)

Appendix 5

Promotion and educational events organised by FPAHK

Promotion and educational events			Total
1	<i>Number of promotion and educational events</i>		
	i) School education seminars	112	120
	ii) Public education seminars	8	
	iii) Community promotion activities	257	257
2	<i>Number of persons attending school education seminars</i>		
	i) Teenage girls/ students	9 972	10 849
	ii) Parents/ guardians	877	
3	<i>Number of publics attending the public events</i>		
	(i) Public education seminars	153	14 855
	(ii) Community promotion activities	14 702	