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Panel on Health Services

Updated background brief prepared by the Legislative Council Secretariat for the meeting on 21 November 2016

Measures for the prevention and control of seasonal influenza

Purpose

This paper provides background information and summarizes the concerns of members of the Panel on Health Services ("the Panel") on measures for the prevention and control of seasonal influenza.

Background

2. Influenza is a highly infectious disease caused by different strains of influenza virus. There are three known categories of influenza, namely A, B and C. Influenza A viruses can further be subtyped on the basis of two surface antigens: haemagglutinin (H) and neuraminidase (N). New subtype variants appear from time to time and at irregular intervals. Antigenic drifts (minor changes) of influenza viruses lead to the emergence of new viral strains every year. According to the World Health Organization ("WHO"), influenza C cases occur much less frequently than influenza A and influenza B.

3. Seasonal influenza affects large segments of the community. For healthy individuals, seasonal influenza is usually self-limiting with recovery in two to seven days. However, seasonal influenza can be a serious illness to the weak and frail or elderly people, and may be complicated by bronchitis, chest infection or even death. In Hong Kong, influenza occurs throughout the year and often displays two seasonal peaks. A smaller summer peak is sometimes observed in July and August. A larger seasonal peak is in winter time, usually from January to March.

4. In the last winter influenza season which started in late January and ended in mid-May 2016, both influenza A(H1N1)pdm09 and influenza B viruses co-circulated in the season. Children were particularly affected in this season due to the predominance of influenza A(H1). More than 80% of institutional influenza-like illness outbreaks were reported in primary schools, kindergartens and child care centres. The peak influenza-associated admission rates recorded among children aged below six years and six to 11 years in this season exceeded those recorded in the same age groups in previous influenza seasons from 2010 to 2015. There were a total of 27 cases of severe influenza-associated complication (including three fatal cases) in children under 18 years old. For adults aged 18 years old or above, 403 cases of influenza-associated admission to the Intensive Care Unit (including 205 fatal cases) were reported.

Deliberations of the Panel

5. The Panel discussed issues relating to the prevention and control of seasonal influenza at a number of meetings in the Fourth and Fifth Legislative Council. The deliberations and concerns of members are summarized in the following paragraphs.

Influenza vaccination

Effectiveness of vaccination

6. Concern was raised about the effectiveness of seasonal influenza vaccination and the best time to receive the vaccination. The Administration advised that seasonal influenza vaccination was one of the effective means in preventing influenza and its complications, as well as reducing influenza-related hospitalization and death. Vaccine effectiveness depended on the similarity between the virus strains present in the vaccine and those circulating in the community. According to WHO, when the vaccine strains closely matched the circulating influenza viruses, the efficacy of inactivated influenza vaccines in individuals aged below 65 years ranged from 70% to 90% in general, whereas that in individuals aged 65 years or above was at best modest. Given that it would take a few weeks after vaccination for antibodies to develop in the body, it would be best to receive vaccination four weeks before the expected arrival of the influenza peak season.

Vaccination for children

7. Members noted with concern that children aged six years or above were not covered under the annual Government Vaccination Programme ("GVP")

which provided free seasonal influenza vaccines to target groups (i.e. at-risk and/or under-privileged populations) and the annual Vaccination Subsidy Scheme ("VSS") which subsidized eligible persons to receive seasonal influenza vaccination from enrolled private doctors. Some members considered that the coverage of GVP should be extended to primary school students as a proactive approach to prevent outbreaks in schools. Some went further to suggest that given the low take-up rate of the seasonal influenza vaccine under GVP, the programme should be extended to people outside the target groups such as young people aged 19 years or below who also recorded a high infection rate.

8. The Administration advised that seasonal influenza vaccination was recommended for individual protection rather than prevention and control of cross infection of the disease in a particular setting. Each year, the Scientific Committee on Vaccine Preventable Diseases ("SCVPD") of the Centre for Health Protection ("CHP") would take into account information provided by WHO on the circulating and emerging influenza strains around the globe as well as the balance between benefits of vaccination and potential risk of adverse vaccine effects when making recommendations to the Department of Health ("DH") on the target groups to receive seasonal influenza vaccination.

9. On the suggestion of providing vaccination services to kindergarten students at campuses under VSS without their having to visit private doctors for vaccination, the Administration advised that all existing vaccination programmes and schemes were voluntary. In addition, consent from parents had first to be obtained before administering any vaccines to children.

Vaccination for older age groups and persons with underlying illnesses

10. Members noted that free seasonal influenza vaccination were provided under GVP to persons aged 50 years or above receiving Comprehensive Social Security Assistance ("CSSA"). Under VSS, elders aged 65 years or above were entitled to receive subsidized seasonal influenza and pneumoccoal vaccinations from enrolled private doctors. There was a suggestion that GVP should also cover persons between the age of 50 to 64 years who were not CSSA recipients, as overseas experience showed that adults, particularly those aged between 50 to 64 years, were at a higher risk for influenza-related intensive care unit admission and death when influenza A(H1N1)pdm09 strain predominated. Members were subsequently advised that given that influenza outbreaks in the community had severely affected elders and persons with underlying illnesses during the 2014-2015 winter influenza season and their higher risk of developing severe complications or death, the scope of the 2015-2016 GVP had been extended, on a pilot basis, to cover all elders aged 65 years or above and persons with intellectual disability ("PIDs") who were

patients of the Hospital Authority ("HA") or designated clinics of DH. Other PIDs were included as a target group under VSS. These two pilot measures would become regularized starting from the 2016-2017 season.

11. Concern was raised about the difficulties encountered by elders living in residential care homes, in particular those with mobility impairment, to receive vaccination from clinics or hospitals under DH or HA. Members were advised that under the GVP's Residential Care Home Vaccination Programme, CHP organized outreaching immunization teams to enable eligible residents and staff of residential care homes for the elderly ("RCHEs") and residential care homes for the disabled to receive free vaccination in their institutions. It was expected that the vaccination rate for institutional elders would be about 80%.

Surge capacity of HA

12. Members were concerned about the high attendance to the Accident and Emergency ("A&E") Departments of public hospitals, the long waiting time for inpatient admission to medical wards via the A&E Departments, as well as the high inpatient bed occupancy rate in medical wards during the winter influenza seasons. Questions were raised about the effectiveness of the measures put in place by HA to tackle the winter surge. To help reduce unnecessary attendance at A&E Departments during winter influenza season, there was a call for the Administration to step up its efforts in appealing to private doctors to open clinics during public holidays to meet the service demand. In addition, there was a need to strengthen the collaboration among HA, DH, the Social Welfare Department ("SWD") and the social welfare sector to provide a coordinated step-down care at the community level.

13. Members were advised that in the 2015-2016 winter influenza season, in addition to measures such as opening 250 new beds and reducing unnecessary admission, HA had, among others, increased the quotas of public general outpatient clinics ("GOPCs") during long holidays to meet the rising service demand for winter surge and formulated a series of step up measures to provide support for discharged patients and emergency services, and to enhance bed deployment and patient flow.

14. On the suggestion of setting up an A&E service hotline staffed by doctors or experienced nurses who would be able to advise as to whether the clinical conditions of the patients concerned should be managed at the A&E Departments or GOPCs, HA advised that the existing triage system of the A&E Departments could ensure that patients with pressing medical needs would receive timely medical treatment.

15. Members noted that HA had designated two laboratories with 24 hours service in the Prince of Wales Hospital and Queen Mary Hospital to handle urgent testing for severe influenza cases outside office hours (i.e. from 5:00 pm every day to 9:00 am of the following day) starting from 6 June 2016. There was a suggestion that since it took time to deliver samples from individual public hospitals to these two laboratories, more laboratories with 24 hours service should be designated to provide urgent testing service during the winter influenza season. HA advised that it would keep in view the situation and assess whether there was such a need.

16. There was a view that Chinese medicine sector should be invited to prepare for the seasonal influenza seasons. According to the Administration, the 18 public Chinese Medicine Centres for Training and Research were endeavored to meet the increasing service demand during the influenza season. Chinese medicine practitioners were also involved in the influenza-like-illness surveillance system for CHP.

Manpower of HA

17. Members expressed grave concern about the readiness of HA to cope with the challenge of upsurge in service demand given its medical and nursing manpower constraints and the low staff morale among the healthcare personnel. There was a suggestion that community nurses should be deployed to pressure wards to meet the rise in hospital admission. Noting that the strategic review on healthcare manpower planning and professional development was underway, members urged the Administration and HA to improve the healthcare professional-to-population ratios when working on the long-term healthcare manpower requirements.

18. Members were advised that since community nurses played a vital role in the prevention of influenza through the provision of nursing support to elderly population in the community setting, the Administration considered it not appropriate to deploy community nurses to hospital settings. It should be noted that compared with 2014-2015, HA had an overall increase in the number of 208 (i.e. 3.5%) doctors, 757 (i.e. 3.2%) nurses and 362 (i.e. 5.3%) allied health professionals in 2015-2016. To meet the service demand and address manpower shortage, HA had extended the coverage of the A&E Support Session Programme from 12 to all 17 A&E Departments and recruited over 1 600 temporary undergraduate nursing students to support clinical services, introduce greater flexibility for participation in the Special Honorarium Scheme to encourage more staff to work extra service sessions, and continue to recruit part-time healthcare staff to ease the workload of frontline staff, etc.

19. At the meeting on 21 March 2016, the Panel passed a motion urging the Government to take forward a number of suggestions[1] to alleviate the plight confronted by frontline healthcare personnel and maintain the quality of public healthcare services.

Infection control measures

20. Members considered it important to step up infection control measures in public hospitals so as to prevent cross infections. They urged the Administration and HA to implement appropriate measures to reduce the infection risk in public hospitals. There was a concern that since RCHEs were regulated by SWD, some RCHEs might consider it not necessary to take heed of the recommendations given by healthcare professionals of HA or CHP on infection control measures to prevent outbreaks of influenza at the RCHEs concerned.

21. HA advised that it had implemented a series of measures to cope with the influenza season. This included promoting hand hygiene in all HA hospitals and clinics; enhancing support to RCHEs by Community Geriatric Assessment Service, Community Nursing Service and Visiting Medical Officer programmes; and restricting visiting hours to acute wards to two hours per day to prevent cross infections. Moreover, each major public hospital had an infection control team to oversee infection control policies and practices. Hospital frontline staff also worked closely with infection control officers to ensure early identification of infectious cases and implementation of appropriate actions to prevent the spread of diseases. The above apart, HA would monitor and where appropriate, follow up with DH and SWD if there were repeated admissions of a cluster of residents developing influenza-like illness from particular RCHEs.

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[1] These suggestions included: (a) suspending all unnecessary internal meetings and administrative measures to enable full dedication of healthcare personnel (including doctors and nurses) to frontline duties and accord priority to managing patients; (b) coordinating among various clusters and hospitals in respect of triaging patients of stable medical condition to those acute hospitals of which the service capacity had not been stretched to the limits, or other convalescent hospitals, so as to ease the overcrowding attendance and enable patients to receive appropriate treatment more readily; (c) setting up 24-hour clinics in the vicinity of the A&E Departments during the influenza peak season and divert those patients being triaged as "semi-urgent" or "non-urgent" cases to these clinics for treatment, in order to alleviate pressure on the A&E Departments; (d) allocating additional resources immediately to address the long-standing problem of shortage in hospital beds, and putting into full operation those hospital beds not yet commenced service, such as those of North Lantau Hospital; and (e) allocating additional resources immediately to tackle the problem of manpower shortfall, and recruit part-time doctors and nurses with reasonable remuneration as early as possible to help ease the manpower shortage problem of public hospitals.

Suspension of classes

22. During the discussion on the prevention and control of influenza in 2011, some members noted with concern the significant surge in the hospital admission rate due to influenza among children aged under five years. There was a view that kindergartens and kindergartens-cum-child centres should temporarily suspend class to prevent widespread of influenza among young children. The Administration advised that the Education Bureau would work closely with DH and maintain close communication with schools to implement preventive measures against influenza at schools. However, it might not be appropriate to, as a preventive measure, require kindergartens and kindergartens-cum-child centres to suspend class throughout every influenza season taking into account the learning needs of children and views of parents.

Risk communication

23. Members were of the view that the Administration should step up its efforts in keeping the public posted of the latest influenza situation. The Administration advised that before the influenza season arrived, CHP would issue alerts to doctors, homes for the elderly, hostels for people with disabilities, schools, kindergartens and child care centres from time to time, so that appropriate prevention actions could be taken. A weekly surveillance report, the Flu Express, would be issued during the flu season to inform the public of the latest situation. In addition, daily updates of the influenza situation were posted on CHP's dedicated influenza webpage to enhance timeliness in circulating information to the public.

Promotion of personal and environmental hygiene

24. There was a view that financial resources should be provided to residential care homes and school bus operators to assist them in enhancing environmental hygiene, such as purchasing additional cleansing materials and enhancing the disinfection of facilities, to minimize the transmission of influenza. The Administration advised that household bleach was an effective and inexpensive disinfectant. Efforts had been and would continue to be made by CHP to provide support and guidelines to schools and other institutions on the necessary precautionary measures.

25. On the suggestion that personal hygiene should be included in the curriculum of kindergartens and primary schools, the Administration advised that efforts had been and would continuously be made by the Education Bureau to encourage schools to ensure the observance of personal hygiene measures so as to guard against the spread of influenza and other communicable diseases.

Recent developments

26. In June 2016, SCVPD recommended, among others, that all members of the public except those with known contraindications should receive seasonal influenza vaccine for personal protection. Having taken into account local disease burden and international experience, it was recommended that for the 2016-2017 season, on top of the priority groups recommended in the 2015-2016 season,[2] children aged six to 11 years should also have higher priority for seasonal influenza vaccination.

27. The 2016-2017 VSS and GVP have been launched on 20 October and 3 November 2016 respectively. Their scopes have both been expanded to cover the following population groups in addition to the previous eligible persons for better coverage:

(a) in addition to children aged between six months and less than six years, children aged six to under 12 years or attending a primary school in Hong Kong are eligible to receive subsidized vaccination from private doctors enrolled in VSS. Those children who are from families receiving CSSA or holding valid Certificate for Waiver of Medical Charges are eligible for free vaccination in the public sector under GVP;

(b) pregnant women receiving CSSA or holding valid Certificate for Waiver of Medical Charges are continuously eligible to receive free vaccination in the public sector under GVP. Other pregnant women have become newly eligible to receive subsidized vaccination from private doctors enrolled in VSS; and

(c) PIDs receiving services at public hospitals and clinics, designated day centres, sheltered workshops and special schools are continuously eligible to receive free vaccination from HA, DH or enrolled Visiting Medical Officers under GVP. In addition to PIDs holding Registration Card for Person with Disabilities with indication of intellectual disability or a medical certificate which indicates the person is a PID or eligible for VSS, persons receiving Disability Allowance (regardless of disability) are newly eligible to receive subsidized vaccination at private doctors enrolled in VSS.

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[2] These priority groups included: (a) pregnant women; (b) elderly persons living in residential care homes; (c) long-stay residents of institutions for persons with disabilities; (d) persons aged 50 years or above; (e) persons with chronic medical problems; (f) health care workers; (g) children aged six months to five years; (h) poultry workers; and (i) pig farmers and pig-slaughtering industry personnel.

28. In addition to expanding the vaccination scope, the Government has increased the subsidy for all eligible groups from $160 per dose of seasonal influenza vaccine in 2015-2016 to $190 per dose of seasonal influenza vaccine in 2016-2017. Private doctors enrolled in VSS are also encouraged to organize outreach vaccination activities to raise the vaccination coverage. According to the Administration, as at 11 November 2016, about 100 doctors have indicated their interest in providing outreach activities. CHP have received around 400 notifications of outreach activities so far, including 49 primary schools, of which 29 have completed their activities.

Relevant papers

29. A list of the relevant papers on the Legislative Council website is in the **Appendix**.

Council Business Division 2
Legislative Council Secretariat
15 November 2016

Appendix

Relevant papers on measures for the prevention and control of seasonal influenza

Committee	Date of meeting	Paper
Panel on Health Services	10.3.2008 (Item V)	Agenda Minutes CB(2)2028/07-08(01)
	16.6.2008 (Item III)	Agenda Minutes
	10.6.2009 (Item I)	Agenda Minutes CB(2)1924/08-09(01)
	9.11.2009 (Item III)	Agenda Minutes CB(2)624/09-10(01)
	14.2.2011 (Item V)	Agenda Minutes CB(2)1175/10-11(01)
	17.12.2012 (Item V)	Agenda Minutes CB(2)458/12-13(01)
	16.2.2015 (Item III)	Agenda Minutes CB(2)880/14-15(01) CB(2)1199/14-15(01)
	21.3.2016 (Item III)	Agenda Minutes CB(2)1501/15-16(01)
	20.6.2016 (Item II)	Agenda Minutes

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