

Legislative Council Panel on Health Services

Preparation for Winter Surge

Purpose

This paper outlines the preparatory work carried out by the Government to tackle influenza winter surge.

Background

2. The period from December to April in the following year is generally considered the peak season for the outbreak of influenza. There is usually another milder peak during summer time. The prevalence of influenza, together with other factors including weather conditions, would usually lead to surge in service demand for public healthcare services. In the past few years, the daily average number of first attendances at Accident and Emergency Departments (AEDs) and the daily admission via AED to medical, orthopaedics and paediatrics wards during the peak seasons were noticeably higher than those during non-peak seasons. For example, the average number of in-patient admissions to medical wards via AEDs per day from December 2016 to May 2017 was 956, which was comparatively higher than the non-surge period admission number of around 850. During the summer surge from June to July 2017, the average admission number was even higher at 1 006 a day. Service demand mainly came from groups with a higher risk for influenza complications, such as children, the elderly and patients with chronic diseases.

Preparation to Tackle Winter Surge

3. To tackle the expected winter surge, the Department of Health (DH) and the Hospital Authority (HA) will implement a series of measures as detailed in the ensuing paragraphs.

Measures Taken by the Department of Health

Vaccination

4. Vaccination is one of the effective means to prevent seasonal influenza and its complications. It also reduces the risks of flu-induced in-patient admission and mortality. Hence, the Government has all along been encouraging the public to receive vaccination as early as possible. It also provides subsidised or free seasonal influenza vaccination (SIV) to eligible groups which are generally at a higher risk of severe complications or even death caused by influenza, or spreading the infection to those at high risk. In this connection, the Vaccination Subsidy Scheme (VSS) and the Government Vaccination Programme (GVP) 2017-18 were launched on 18 October 2017 and 25 October 2017 respectively.

5. Under the GVP and VSS 2017-18, the Government regularises the provision of free/subsidised SIV to cover last year's expanded target groups so as to enhance protection for the needy groups. For GVP, the expanded target groups included children aged 6 to under 12 from families receiving Comprehensive Social Security Assistance or holding valid Certificates for Waiver of Medical Charges and all persons receiving Disability Allowance (PDAs). As regards VSS, children aged 6 to under 12, PDAs and pregnant women have been covered since 2016-17. The subsidy provided by the Government remains at the same level as last year, i.e. \$190 per dose of seasonal influenza vaccine. Detailed information on the scope of GVP and VSS 2017-18 is set out in **Annex A**.

6. Apart from providing vaccination at clinics, enrolled private doctors in the VSS can also organise outreach vaccination activities at primary schools, kindergartens, elderly centres, offices of District Council members and others, to make it more convenient for students and other eligible groups to get vaccinated for protection before the influenza season arrives. In this regard, the Centre for Health Protection (CHP) of the DH has already arranged briefings for schools, non-governmental organisations (NGOs) serving the elderly and other target groups, and doctors on points to note for provision of outreach vaccination services. "Guidelines on Vaccination at Non-clinic Settings" have been uploaded to the CHP's website for enrolled doctors' reference. Up to 12 November 2017, the CHP received notifications of more

than 700 outreach vaccination activities to be organised, including 40 activities in primary schools, 70 activities in kindergartens, 130 activities in elderly centres, over 450 activities in offices of District Council members and others. Around 70 private doctors have indicated their interests in providing outreach vaccination services. The relevant list of doctors is available on the CHP's website.

7. In February 2017, the World Health Organization (WHO) recommended the composition of seasonal influenza vaccine to be used in the northern hemisphere (NH) including Hong Kong in the 2017-18 season. Regarding the H3N2 strain, the WHO recommended an A/Hong Kong/4801/2014 (H3N2)-like virus for NH including Hong Kong. The CHP's virus characterisation has not detected any significant antigenic changes in the circulating H3 strains predominated in the summer season in 2017. The CHP will continue to closely monitor the local and global influenza activities, predominating strains, vaccine effectiveness and relevant scientific literature.

8. Invasive pneumococcal diseases can occur in persons of any age but the risk is substantially higher for the elderly. The dual vaccination of SIV and pneumococcal vaccination can lower the risk of hospitalisation and mortality among elderly. Hence, the Government has been providing 23-valent pneumococcal polysaccharide vaccine (23vPPV) to elderly under GVP and VSS since 2009. After taking into account the latest recommendation of the Scientific Committee on Vaccine Preventable Diseases on pneumococcal vaccination in 2016, the Government has started a new initiative of providing/subsidising an additional dose of 13-valent pneumococcal conjugate vaccination (PCV13) to the eligible elderly with high-risk conditions in GVP and VSS 2017-18.

Publicity and Surveillance

9. On publicity and health education, the CHP will promote influenza vaccination to the public through a series of publicity activities. A variety of health education materials on the prevention of influenza, including a thematic webpage, television and radio announcements of public interests, guidelines, pamphlets, posters, booklets, frequently asked questions and exhibition boards, have been produced. Various publicity and health education channels like websites, Facebook pages, YouTube channels, the GovHK Notifications mobile

application, television and radio stations, health education hotline, newspapers and media interviews, have been deployed for promulgation of health advice. The CHP has also widely distributed relevant health education materials to public and private housing estates, healthcare institutions, schools and NGOs. Targeting ethnic minorities, relevant health education materials in Bahasa Indonesia, Hindi, Nepali, Thai, Urdu and Tagalog are being developed and will be distributed to NGOs serving them.

10. As for the elderly, the Elderly Health Service (EHS) of the DH has deployed its Visiting Health Teams to conduct health promotion activities for influenza prevention for the elderly in the community, as well as those living in residential care settings and their carers. It also provides infection control training for staff of elderly care facilities. During the implementation of the influenza vaccination programmes each year, the EHS will enhance its efforts in promoting influenza prevention, which include encouraging the elderly in the community and members of Elderly Health Centres (EHCs) to receive influenza vaccination. To facilitate more elderly in receiving influenza vaccination, other than providing vaccination to their own members, 14 EHCs will also offer free vaccination to non-members who are Hong Kong residents aged 65 or above¹.

11. The CHP has been closely monitoring influenza activity in the community through a series of surveillance systems involving childcare centres, residential care homes for the elderly, HA's clinics and AEDs, clinics of private practitioners and clinics of Chinese medicine practitioners. Regarding the monitoring of in-patients with influenza cases, the CHP has conducted regular surveillance of influenza-associated cases with severe complications or death among paediatric patients aged below 18. For adults, the CHP has collaborated with the HA and private hospitals to operate an enhanced surveillance system during influenza seasons since 2011 for monitoring severe influenza cases (i.e. admissions to intensive care units or death). The CHP also monitors the positive influenza detections among respiratory specimens received by its Public Health Laboratory Services Branch, and performs characterisation of antigenic/genetic changes, including susceptibility to antiviral agents.

¹Details of the vaccination service at EHCs under the GVP (2017-18) are available from the website of the EHS: http://www.elderly.gov.hk/english/health_promotion_activities/government_vaccination_programme.html

12. The CHP disseminates information in a transparent and timely manner to ensure that the most up-to-date information is made available to the public. Influenza surveillance data are uploaded to the CHP's website every week and summarised in the weekly on-line publication entitled "Flu Express".

13. Meanwhile, the CHP maintains close liaison with the WHO and the health authorities respectively of the Mainland, Macao and neighbouring and overseas countries to monitor influenza activities and their evolution around the world. It also keeps relevant stakeholders (including Government bureaux and departments, healthcare sector, education sector, District Councils, and NGOs) updated of the latest influenza activity and preventive measures, and solicits their collaboration and support to strengthen promulgation of related health messages.

Measures Taken by the Hospital Authority

14. To cope with the continuous and dramatic increase in service demand that may happen during the seasonal peak of influenza, the HA started to make preparation in August this year. The key strategies and related measures of the response plan for winter surge are outlined at **Annex B**. During the last winter surge, the HA formulated a response plan for the period from December 2016 to May 2017 to tackle the anticipated surge in service demand. The response plan was further extended to September 2017 to tackle the extraordinary upsurge in service demand during the summer flu season. In light of experiences gained, the HA would adjust the response plan for the coming winter surge.

15. The focus of the response plan for 2017-18 winter surge is to increase bed capacity. In 2017-18, 229 new beds are being opened and for 2018-19, more new beds are planned to be opened. In addition, time-limited temporary beds are being planned for the winter surge period, including advance opening of some of the beds in the 2018-19 bed plan.

16. In addition to increasing bed capacity, it is estimated that there will be an annual increase of 129 (2.2%) doctors, 823 (3.3%) nurses and 272 (3.6%) allied health professionals in 2017-18 as compared with 2016-17. Other measures include, for example:

- (a) Continuing to recruit part-time and temporary healthcare staff, and agency nurses and supporting staff;
- (b) Encouraging healthcare staff to receive influenza vaccination;
- (c) Enhancing virology services to facilitate and expedite patient management decision;
- (d) Enhancing ward rounds of senior clinicians and related supporting services in the evenings, at weekends and on public holidays;
- (e) Enhancing discharge support (e.g. non-emergency ambulance transfer service, pharmacy, portering services);
- (f) Increasing the service quotas of general out-patient clinics (GOPCs) especially during long holidays; and
- (g) Providing geriatrics support and additional clinic sessions to AEDs.

17. Furthermore, the HA will collaborate with various government departments and external parties to cope with service demand. Such measures include, for example:

- (a) Inviting doctors of the DH and private doctors via the Hong Kong Medical Association (HKMA) to work for the HA on part-time basis;
- (b) Liaising with the Social Welfare Department to enhance care and infection control at Residential Care Homes for the Elderly and Residential Care Homes for Persons with Disabilities, and speed up placement of patients requiring Residential Care Homes;
- (c) Soliciting support from Auxiliary Medical Service and Hong Kong St. John Ambulance for patient transportation;
- (d) Collaborating with private hospitals with low-cost hospital bed arrangement by transferring suitable patients for completion of treatment;
- (e) Appealing to private doctors via HKMA to provide services during long holidays and extend their daily service hours during winter surge; and

- (f) Appealing to Chinese medicine practitioners to provide extended services to cope with the increased demand during winter surge.

Publicity and Monitoring

18. The HA will implement various external and internal communication initiatives to enable the public and staff to have a clearer understanding of the details and measures for winter surge. The initiatives include the following:

- (a) Holding press conferences to inform the public of the service demand of the HA and its response plan;
- (b) Providing one-stop information on winter surge at the HA's website and the "HA Touch" mobile application, including Accident and Emergency (A&E) waiting time, related service statistics, service announcements, news and articles, web link of private doctors and Chinese medicine practitioners directories, and GOPC information for public reference;
- (c) Providing on-site information at AEDs on A&E waiting time, related service announcements, and web link and hard copies of private doctors and Chinese medicine practitioners directories from the Primary Care Directory;
- (d) Appealing to the public and carrying out publicity through television, radio, newspapers, magazines and social media such as Facebook and YouTube; and
- (e) Hospital visits and cluster forums for engaging frontline staff.

19. To provide timely treatment for patients through effective use of hospital beds and improvement of patient flow, the HA will continue to monitor the admission and discharge process of hospitals, including the in-patient admission statistics, the number of discharges and transfers during weekends and holidays, and the average length of stay of all acute and convalescent hospitals.

20. The HA has started to closely monitor the daily service statistics of all acute hospitals, including the number of first attendances at the AEDs, the number of in-patient admissions to medical wards via the AED and the in-patient bed occupancy rate from November this year, so as to implement measures under the response plan accordingly.

Long-term Planning in Response to Increasing Demand for Healthcare Services

21. As announced in the Policy Address 2017, the Government will deploy sufficient resources and enhance the supporting infrastructure to keep improving the healthcare services and facilities provided by the public sector. We will introduce a new arrangement by undertaking to increase the recurrent funding for the HA progressively on a triennium basis, having regard to population growth rates and demographic changes. This will enable HA to address the staffing issue and service demands arising from a growing and ageing population in a more effective and sustained manner. On the supporting infrastructure, the Government and the HA will press ahead with the delivery of the 10-year Public Hospital Development Plan, for which \$200 billion has been earmarked. Upon completion of the various hospital and community health centre projects under the ten-year plan, we expect there will be an additional provision of about 5 000 beds, over 90 operating theatres, around 2 800 000 annual capacity of specialist out-patient clinic attendances and around 430 000 annual capacity of GOPC attendances to meet the public demand. We will also kick-start the next round of public hospital development planning in the coming five years.

22. In view of an ageing population and the general shortage of healthcare manpower in the past years, the Government has substantially increased the number of University Grants Committee (UGC)-funded degree places in healthcare disciplines by about 60% over the past decade. The Government will consider further increasing the number of UGC-funded healthcare training places for those disciplines (including doctors, dentists, nurses and relevant allied health professionals) which will still be facing manpower shortage in the medium to long term in the 2019-20 to 2021-22 triennium.

23. The HA has been proactively conducting recruitment to fill the vacancies of healthcare professionals and increase manpower to meet service demand. In 2018-19, 420 medical graduates will complete internship training, an increase by 100 as compared with 320 in 2017-18. The number will be further increased to 470 starting from 2023. It is expected that the manpower shortage of doctors will then be alleviated. As for nurses, the HA plans to recruit 2 130 nurses in 2017-18 to alleviate manpower shortage, maintain current services and roll out service improvement measures.

Advice Sought

24. Members are invited to note the content of the paper.

Food and Health Bureau
Department of Health
Hospital Authority
November 2017

Eligible Groups of Government Vaccination Programme 2017-18 (Seasonal Influenza Vaccination)

Priority groups recommended by Scientific Committee on Vaccine Preventable Diseases	Eligible groups of Government Vaccination Programme 2017-18
1. Pregnant women	Pregnant women who are Comprehensive Social Security Assistance (CSSA) recipients or holders of valid Certificate for Waiver of Medical Charges (Certificate)*
2. Elderly persons living in residential care homes	Residents of residential care homes for the elderly (RCHEs)
3. Long-stay residents of institutions for persons with disabilities	Residents of residential care homes for the disabled (RCHDs)
4. Persons aged 50 years or above	Community-living persons: <ul style="list-style-type: none"> ● 65 years or above: all elderly people ● 50 years to under 65: CSSA recipients or valid Certificate* holders
5. Persons with high risk conditions [#]	<ul style="list-style-type: none"> ● Community-living persons with intellectual disabilities or Disability Allowance recipients: clients of Hospital Authority (HA), clinics of Department of Health (DH), designated day centres, sheltered workshops or special schools ● Aged under 50 years attending public clinics: CSSA recipients or valid Certificate* holders with high-risk conditions[#] ● In-patients (including paediatric patients) of HA: hospitalised patients with high-risk conditions[#] (e.g. those in infirmary, psycho-geriatric, mentally ill or mentally handicapped units/wards) ● Paediatric out-patients: with high-risk conditions[#] or on long-term aspirin
6. Healthcare workers (HCWs)	HCWs of DH, HA, RCHEs, RCHDs or other Government departments

Priority groups recommended by Scientific Committee on Vaccine Preventable Diseases	Eligible groups of Government Vaccination Programme 2017-18
7. Children from 6 months to under 12 years	Children aged 6 months to under 12 years from families receiving CSSA or holding valid Certificate* <u>Where to vaccinate?</u> <ul style="list-style-type: none"> ● 6 months to under 6 years: Maternal and Child Health Centres of DH ● 6 years to under 12 years: Student Health Service Centres of DH
8. Poultry workers	Poultry workers or workers who may be involved in poultry-culling operations
9. Pig farmers or pig-slaughtering industry personnel	Pig farmers or pig-slaughtering industry personnel

* Certificate for Waiver of Medical Charges issued by Social Welfare Department

High-risk conditions include:

- History of invasive pneumococcal disease, cerebrospinal fluid leakage or cochlear implant;
- Chronic cardiovascular (except hypertension without complications), lung, liver or kidney diseases;
- Metabolic diseases including diabetes mellitus or obesity (Body Mass Index 30 or above);
- Immunocompromised states related to weakened immune system due to conditions such as asplenia, Human Immunodeficiency Virus infection/Acquired Immune Deficiency Syndrome or cancer/steroid treatment;
- Chronic neurological conditions that can compromise respiratory functions or the handling of respiratory secretions or increase the risk for aspiration, or those who lack the ability to take care of themselves; and
- Children and adolescents (aged 6 months to 18 years) on long-term aspirin therapy.

Eligible Groups of Vaccination Subsidy Scheme 2017-18 (Seasonal Influenza Vaccination)

Priority groups recommended by Scientific Committee on Vaccine Preventable Diseases	Eligible groups of Vaccination Subsidy Scheme 2017-18 (\$190 per dose)
1. Pregnant women	All pregnant women
2. Children aged 6 months to under 12 years	All children aged 6 months to under 12 years
3. Persons with high risk conditions [#]	Community-living persons with intellectual disabilities or receiving Disability Allowance, regardless of disability (i.e. disabled physical, mental, intellectual or other conditions)
4. Persons aged 50 years or above	All elderly aged 65 years or above

[#] High-risk conditions include:

- History of invasive pneumococcal disease, cerebrospinal fluid leakage or cochlear implant;
- Chronic cardiovascular (except hypertension without complications), lung, liver or kidney diseases;
- Metabolic diseases including diabetes mellitus or obesity (Body Mass Index 30 or above);
- Immunocompromised states related to weakened immune system due to conditions such as asplenia, Human Immunodeficiency Virus infection/Acquired Immune Deficiency Syndrome or cancer/steroid treatment;
- Chronic neurological conditions that can compromise respiratory functions or the handling of respiratory secretions or increase the risk for aspiration, or those who lack the ability to take care of themselves; and
- Children and adolescents (aged 6 months to 18 years) on long-term aspirin therapy.

Major Strategies and Measures of the Hospital Authority for Winter Surge

1. Enhancing infection control measures
 - promoting hand hygiene and droplet precaution among staff, patients and visitors at HA venues
 - supporting the Government Vaccination Programme and encouraging vaccination of staff
 - ensuring adequate stockpile of antiviral drugs such as Tamiflu for treatment according to prevailing clinical guidelines

2. Managing demand in the community
 - enhancing support for RCHEs through the Community Geriatric Assessment Services, Community Nursing Services and Visiting Medical Officer Programmes to facilitate management of simple cases outside hospitals
 - more frequent visits to RCHEs and early post-discharge visits
 - enhancing support to chronic disease cases for better self-management through pro-active follow up by the Patient Support Call Centre

3. Gate-keeping to reduce avoidable hospitalisation
 - enhancing geriatrics support to AEDs
 - setting up additional observation areas in AEDs
 - enhancing virology services to facilitate and expedite patient management decision
 - deploying additional staff to improve patient flow and ease prolonged waiting

4. Improving patient flow
 - speeding up transfer of stable patients from acute hospital to convalescent hospital in the cluster
 - enhancing ward rounds by senior doctors and relevant support services during evenings, weekends and public holidays
 - strengthening support to patients upon discharge from hospitals

5. Optimising and augmenting buffer capacity

- opening new hospital beds, and time-limited beds and temporary beds where necessary
- increasing manpower of doctors, nurses and allied health professionals
- continuing the A&E Support Session Programme
- optimising utilisation of buffer wards and expanding day follow-up service
- augmenting manpower by special honorarium scheme, leave encashment, and with the support of temporary undergraduate nursing students and auxiliary medical service
- expanding service quotas in GOPCs during long holidays

6. Reprioritising core activities

- reducing elective admission to reserve capacity for meeting demands from acute admission via the AEDs
- suspending / deferring non-emergent elective operations

7. Enhancing communication with the public

- managing public expectation on the waiting time at AEDs and providing information of private clinics to the public
- alerting the public of the possible postponement of elective services
- providing daily key statistics to the public during peak periods