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Legislative Council Panel on Health Services
Subcommittee to Monitor the Implementation
of the Recommendations of the SARS Expert Committee

Progress of Implementation of the
Recommendations of the SARS Expert Committee

Purpose

This paper provides an overview of the latest progress concerning implementation of the recommendations made by the SARS Expert Committee (EC).

Background

2. In its report to the Chief Executive in October 2003, the SARS EC put forward 46 recommendations to enhance the preparedness of Hong Kong for future outbreak of infectious diseases. An internal Task Force chaired by the Secretary for Health, Welfare and Food (SHWF) with representatives from the Health, Welfare and Food Bureau (HWFB), Department of Health (DH) and Hospital Authority (HA) was set up to coordinate implementation of the recommendations.

3. A Monitoring Committee (MC)[1] was established to oversee the implementation of the recommendations of the EC Report. The first MC meeting was held on 19 January 2004 to review progress of implementation. SHWF, Director of Health, and Chief Executive of HA attended the meeting to report progress and discuss areas of further efforts. The MC also visited the Public Health Laboratory Centre and Princess

[1] The MC was co-chaired by Sir Cyril Chantler and Professor Sian Griffiths who were also Co-Chairs of the EC. Other members of the MC are Dr the Hon Lo Wing-lok, Professor Lee Shiu-hung and Professor Rosie Young.

Margaret Hospital, and met with the recovered SARS patients and bereaved families. To enhance transparency of the MC's work, the discussion materials produced for the MC meeting, the meeting minutes and other relevant correspondences have been uploaded to the MC's website at www.sars-monitoringcom.gov.hk.

Progress of Implementation

4. The following provides a stock-take of the latest progress of implementation of the recommendations of the EC Report. Latest developments on those in relation to engaging the community are set out in a separate paper.

Organization Review

5. The organization review on the interface between HWFB and its departments is underway. The starting point is the setting up of the Centre for Health Protection (CHP) which by itself forms part of the reorganization. The CHP will centralize responsibilities, authority and accountability for prevention and control of communicable diseases initially.

6. Upon the establishment of CHP and when it further develops, the CHP may take on other aspects of health protection covering non-communicable diseases, food safety and hygiene, veterinary issues, etc.

Centre for Health Protection

7. Having regard to the health needs and circumstances of the local population, the recommendations of the EC and the views of an advisory committee comprising healthcare professionals and academics, we have drawn up an organization structure with six functional branches[1] and a phased implementation approach for the CHP. The CHP will be

[1] The six functional branches are Surveillance and Epidemiology Branch (SEB), Infection Control Branch (ICB), Public Health Laboratory Services (PHLS), Public Health Services (PHS), Programme Management and Professional Development Branch (PMPDB) and Emergency Response and Information Branch (ERIB).

established by mid-2004. Initial attention will be paid to the development of the Surveillance and Epidemiology Branch (ESB) and Infection Control Branch (ICB). With the commencement of operation of these two branches, there will be enhancement and integration of resources to strengthen disease surveillance and standardization of infection control protocols in various settings. All six branches will be fully developed in 2005.

8. The CHP will be operationally headed by a Controller, CHP who will report to the Director of Health. The Legislative Council Finance Committee endorsed the creation of the Controller post on 27 February 2004. A post-holder for the Controller is expected to be appointed before end April. Most branch heads/directorate officers of the CHP and their supporting staff have been identified through resources redeployed from DH and HA. There will be about 200 additional staff to support the operations of the CHP upon its full establishment in 2005.

9. The organization structure and scope of work of the CHP would need to be continuously reviewed and updated. In the light of a post-establishment review to be conducted in 2005, we will consider the need for the CHP to expand into other health protection areas. We will continue to draw on the views of local and overseas healthcare experts and other relevant stakeholders in mapping out future development plans for the CHP.

Contingency Plan and Emergency Response

10. The SARS contingency mechanism[2] is underpinned by detailed contingency plans developed by DH and HA, the two operational agencies with the most involvement in the anti-SARS battle. DH's contingency plan features sections on case definitions, command structure,

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[2] Central to this contingency mechanism is a three-level response system to ensure expeditious and effective interventions for various SARS emergencies:

- ***Alert Level Response*** is activated when there is a laboratory-confirmed SARS cases outside Hong Kong or a SARS Alert in Hong Kong;
- ***Level 1 Response*** is activated when there are one or more laboratory-confirmed SARS cases in Hong Kong occurring in a sporadic manner; and
- ***Level 2 Response*** is activated when there are signs of local transmission of the disease.

staff deployment, communication protocols, port health and quarantine measures, operational guidelines on isolation, evacuation and disinfection of building premises, and field investigation protocols for various SARS scenarios involving flights, hospitals, general practitioners, elderly homes, schools, etc. Included in HA's contingency plan are an outbreak definition, a three-tier response framework applicable to hospital setting, and a checklist of responses covering collation and dissemination of epidemiological information, infection control and outbreak management, decanting and mobilization of patients, human resources deployment, supplies of drugs, consumables and equipment, clinical management and communication. In addition, some 40 departments/agencies other than DH and HA have developed contingency plans to combat SARS in accordance with objectives and guidelines laid down by HWFB.

11. Over the past eight months, HA organized over 40 drills in the hospital setting to assess the effectiveness of its contingency plans and to ensure that responsible officers are able to put the plans into practice. HWFB and DH have also co-organized a major exercise in late 2003 to strengthen inter-agency communications and collective capacity and confidence in coping with SARS-related emergencies in the community setting. A total of ten government bureaux/departments/agencies took part in that exercise. DH further conducted a drill with a private hospital in February 2004. Private hospitals are encouraged to conduct internal drills.

12. Meetings have been held by DH, HA and private sectors to exchange outbreak information and coordinate surveillance and response. A section of DH's official website is dedicated to communicate with the registered private hospitals and healthcare institutions. All private hospitals have prepared contingency plans on SARS. They have conducted or are planning to conduct drills within hospital and/or in collaboration with DH.

13. The above SARS contingency measures constitute useful building blocks towards the development of a major disease outbreak control plan. The tasks ahead are to add more building blocks and knit

them together into a totality that can cater for different circumstances of public health significance to the local population. The Emergency Response and Information Branch (ERIB) of the CHP to be established by September 2004 will assume a leading role in developing the overall outbreak control plan. It will draw up contingency plans for different communicable disease scenarios and organize exercises/drills to enhance collective preparedness and capacity to handle the various scenarios.

Communications

14. We recognize that communication is an essential component of outbreak management. We will vest the overall responsibility for devising a communication strategy with the CHP. The ERIB of the CHP will be responsible for, amongst others, the formulation and regular updating of a communication strategy for use in times of an infectious disease outbreak. Pending the formal establishment of the CHP, HWFB, DH and HA have already mapped out the outline of a government-wide communication strategy to implement the EC's recommendation in this respect and to meet the immediate need to maintain close communication with the public over possible resurgence of SARS and outbreak of other infectious disease in the interim. We have reported the outline of the communication strategy to this Sub-committee in an earlier paper issued in December 2003 [Paper No. CB(2)476/03-04(02)]. When alert to the risk of SARS/other infectious disease is heightened, HWFB will monitor developments and decide on communication plans to keep the community closely informed. The messages to give out include the risk assessment, precautionary and preventive measures that the public health sector and other sectors have taken/will take, and preventive measures that the general public should take. If and when there are actual cases, there will be joint DH and HA daily updates of the situation provided to the public and the media. The frequency of these media briefings will be increased if and when necessary. There will be full co-ordination amongst the different parties in delivering their messages. This communication strategy outline has served us well in the past winter season.

15. At the same time, DH and HA have been forging closer

partnership with the media through closer regular contacts so that the latter will be better placed to convey accurate public health information to the public.

16. The CHP will enrich this communication strategy after its establishment. To play their roles well, DH and HA are developing communication strategies relevant to their roles and functions. The CHP will also ensure that the respective communication strategies developed by the DH and HA complement and supplement each other as well as dovetail with the overall, government-wide communication strategy.

17. DH and HA have been organizing training programmes for their staff to improve their communication skills. Some examples of these training programmes include a workshop on risk assessment and communication conducted by the School of Public Health of the University of Hong Kong organized by DH in December 2003, a Crisis Communication and Management seminar organized by HA in October 2003 and a training package on risk communication delivered by the Director of Risk Communication Centre, New York in March 2004 which was attended by DH, HA, HWFB staff as well as representatives from private hospitals.

18. HA has also made substantive progress in improving internal communication with its staff. Designated internal communication coordinators have been appointed in all clusters and Staff Communication Ambassadors have been appointed in all hospitals. The internal communication infrastructure has also been reformed. Preparation for activating 24-hour staff help desks during times of crisis has been put in place. Staff to man these help desks are receiving training in March and April 2004. HA is also reviewing the effectiveness of the existing consultation channels.

19. For communications between patients and their families during isolation, hospital clusters have adopted different options including videophones, public-switch-telephone-network videophones and video conferencing equipment in isolation facilities. The equipment will be

activated and put into use in times of a major outbreak.

Surveillance, Information and Data Management

20. To improve the current data management system to better support the control of communicable diseases, we are planning the development of a Communicable Disease Information System (CDIS) that enables both the public and private sector to perform the critical functions of disease surveillance including case notification, timely alert and early detection of emerging infectious diseases. The CDIS will capture data from the following sources:

- notification of patient information in the case of notifiable diseases by medical practitioners working in both the public and the private sectors;
- clinical and epidemiological data within the health care environment of DH and HA;
- laboratory information from DH and HA laboratories; and
- at a second stage, syndromic surveillance data obtained from the existing General Out-Patient Clinics sentinel network as well as public and private hospitals, schools, elderly homes and private primary care clinics.

Based on current estimate, the project will cost about $234 million and will largely be completed in three years' time.

Cooperation with the Pearl River Delta

21. Since the SARS outbreak last year, a great deal of efforts have been made by the Guangdong Province, Macao and Hong Kong to ensure prompt and timely exchange of important information about infectious disease outbreaks and incidents. A SARS notification mechanism among Guangdong, Hong Kong and Macao for regular exchange of latest

information has been established. The three places agreed to exchange information about statutory notifiable diseases of the three places on a monthly basis and infectious diseases of concern as and when necessary; report promptly among the three places sudden upsurge of any infectious diseases of unknown nature or of public health significance; and establish a point-to-point information exchange mechanism. The three places also agreed to explore the development of an information system on notification of infectious diseases; start collaboration on scientific research and strengthen exchange and collaboration on surveillance; discuss and exchange planning and development of admission and treatment facilities for infectious diseases; and enhance training and visit of professionals in public health and infectious diseases.

22. The recent SARS cases in Guangdong have demonstrated the collaborative efforts in the prevention and control of the disease in the Pearl River Delta. On further cooperation, experts of the three places met in February 2004 to exchange views on the prevention of avian influenza and share professional experience on the management of the disease. DH and HA will continue to liaise with the authorities of Guangdong and Macao to strengthen communication on notification of infectious diseases and promote further exchanges among professionals of the three places.

Research and Training

23. After the SARS epidemic, the Government established a $500 million research fund to encourage, facilitate and support research on the prevention, treatment and control of infectious disease, in particular emerging infectious diseases such as SARS. Of this amount, $50 million is provided to support research projects on infectious diseases in the Mainland through the Chinese Ministry of Science and Technology. The remaining $450 million is used to support research on infectious diseases in Hong Kong. By the end of March 2004, the Research Fund for the Control of Infectious Diseases has provided funding support to a wide portfolio of research projects, as follows:

- $22 million earmarked for the University of Hong Kong to undertake a portfolio of basic laboratory, epidemiological and public health research in emerging infectious diseases, and $8 million for the University to strengthen its Bio Safety Level III laboratory facilities;

- $25 million earmarked for the Chinese University of Hong Kong to undertake a portfolio of clinical trial and public health research in emerging infectious diseases;

- funding consideration is being made to support a portfolio of research studies on nosocomial infection and long term follow-up of SARS patients to be undertaken by a consortium comprising the Hong Kong University of Science and Technology, the Hong Kong Polytechnic University and HA; and

- funding consideration of $18 million is being made to support 24 investigator-initiated projects on infectious diseases covering basic research, etiology, epidemiology and public health as well as clinical and health services research.

24. For the purpose of infection control training, $150 million from the Training and Welfare Fund was available for HA to set up programmes of infectious disease control training, epidemiology, crisis evaluation, quality management and risk assessment. From September 2003 to March 2004, more than 30,000 health care workers across different disciplines in HA (including contractors' staff) have been given basic and/or refresher training on infection control. In addition, approximately 550 of the targeted professional staff have received more in-depth training on contact tracing, outbreak management, avian flu management, training on nasopharyngeal aspirates, clinical epidemiology and surveillance and psychological preparation for crisis.

25. In addition, DH has developed partnership programmes with the Hong Kong College of Community Medicine, local universities, and overseas institutions including the Faculty of Public Health of the United

Kingdom to provide public health training to its staff on a systematic basis. Secondment opportunities to the World Health Organisation, CDC Atlanta, and the Health Protection Agency of the United Kingdom are also made available to staff to enhance competence and capacity. Between November 2003 and January 2004, a total of 1,176 medical/nursing/paramedical staff have received training through the infection control seminar series "Be Prepared for the Return of SARS".

Coordination within Hong Kong

26. Effective communication and coordination are vital at every level when dealing with a major outbreak. Since late 2003, HWFB has assumed a more proactive role in coordinating inter-departmental efforts to combat communicable diseases of public health significance to our community. The underlying tenet is that a population-based, cross-sectoral approach is vital for effective prevention and control of infectious diseases, and hence departments/agencies other than DH/HA and various sectors of the community must be engaged to contain outbreaks or minimize risks thereof. A case in point is the high-level inter-departmental meeting chaired by SHWF in January 2004 to review precautionary measures to prevent the return of SARS in Hong Kong. Inter-departmental meetings are triggered on a need basis, an important objective of which is to engage the participation of the private sector through efforts of departments/agencies with well-established connections to the trades concerned.

27. On interface with private hospitals, DH maintains an effective disease surveillance system with the private sector where each private hospital is required to submit to DH weekly return on pneumonia cases, and daily return on SARS and acute respiratory illness outbreak. With effect from January 2004, private hospitals and medical practitioners are also required to report pneumonia cases with history of travel to Guangdong within 10 days before onset of symptoms. DH also provides free laboratory consultation services on SARS for private hospitals. Regular and ad hoc inspections to private hospitals are carried out to ensure they are implementing proper infection control practices. A

dedicated website is established to enhance communication with private hospitals. Sentinel private doctors also participate in various sentinel surveillance systems: influenza-like illness, hand-foot-mouth disease, acute conjunctivitis, acute diarrhoeal disease, and antimicrobial resistance, etc.

28. On interface between DH and HA, DH collaborates with HA in the collection of data in sentinel surveillance of infectious diseases among the elderly in residential care homes for the elderly. There is also regular and ad hoc exchange on information on outbreak reporting, inpatient discharges and deaths statistics on specified infectious diseases. HA representative is a member of Interdepartmental Coordinating Committee on Dengue Fever while DH representative is a member of HA Central Committee on Infectious Disease. On interface between HA and the private sector, HA has established referral channels for private hospitals and drawn up referral guidelines.

29. Actions have been taken to improve the working relationships among DH, HA and private sector, universities and primary care sector. The CHP to be established will put together staff from HA, DH and academic institutions. There will also be rotation of staff between DH and HA in the CHP. Upon the establishment of the CHP, the Infection Control Branch will support surveillance and epidemiological investigation of unusual infections and nosocomial infections in hospitals. It has been agreed that about 40 professional staff of HA will be seconded to different branches of the CHP to provide support and exchange experience in various public health specialties in mid-2004. It has also been agreed with universities that experts in the relevant fields be invited as honorary advisers to provide input to the public health programmes. The CHP will set up a number of scientific committees comprising professionals of the CHP, HA, academia and other organizations to provide strategic directions to manage hazards of public health importance. A network of laboratories among DH, HA and the universities have also been set up.

30. Discussions have been held with private hospitals and medical associations on enhancing collaboration between the private sector in the event of an outbreak, and with voluntary sector and non-governmental

organizations in providing care for those who are affected by the outbreak. All private hospitals have prepared and submitted their SARS contingency plans to DH. Some private hospitals have indicated that they are willing to take in non-SARS patients to relieve the burden to public hospitals so that public hospitals may reserve more beds to serve SARS patients. As many non-government organizations (NGOs) are providing integrated care to frail elders in the community, DH is working closely with the Hong Kong Council of Social Services (HKCSS) and other NGOs to develop a specific training programme on infection control for carers providing community support services. Guideline on prevention of communicable diseases and supplementary guideline for the prevention of respiratory infections and SARS have been issued to residential care homes for the elderly and persons with disabilities.

31. Sentinel surveillance for some 50 private doctors are already in place. Actions are being taken to expand this surveillance network to include Chinese medicine practitioners. A web-based notification system of notifiable diseases by private practitioners will be launched. Laboratory information is being shared among Government, HA and universities for clinical, epidemiological and research purpose. A Task Force led by HA comprising members from the six laboratories performing SARS tests and the Government Virus Unit under DH has also been established to consider the necessary protocol arrangements, facilitate contingency planning on operating procedures, and conduct cross-audit of safety and security measures and drills amongst laboratories performing SARS tests.

Epidemic Management Capability

32. Much effort has been made to enhance the management capability in times of an epidemic. About 1,400 isolation beds are available in the 14 acute hospitals in the 7 clusters to receive SARS patients in stages. Two infectious disease centres in two hospitals have been planned. Finance Committee’s approval for the one in Prince Margaret Hospital will be sought in May 2004. A number of facilities including holiday camps and public housing blocks for isolating non-

symptomatic close contacts of SARS patients have also been earmarked. Sufficient supplies of drugs, vaccines and personal protection equipment have been arranged.

33. On cooperation with voluntary sectors, back-up service at times of outbreak from voluntary sectors such the Auxiliary Medical Service and Civil Aid Service has been arranged. Contingency plan on home/on-site confinement has been put in place, and operational guidelines for moving residents to designated quarantine centres have been drawn up.

Clinical Practice and Occupational Health

34. On clinical practice for SARS, HA has established treatment protocols for SARS and the latest guidelines will be posted to the HA website for reference. On occupational health, an alert system for reporting multiple staff taking sick leave with the same symptom has been put in place. An occupational safety and health (OSH) communication network between HA Head Office and clusters and within clusters will be developed, and an overall review of the OSH service will be conducted.

Post-SARS Environment and its Impacts

35. HA has set up 12 post-SARS clinics. All the recovered SARS patients have been invited for magnetic resonance imaging (MRI), psychosocial and other functional screenings. About 13% of them have been diagnosed with bone disease avascular necrosis, and management protocols for these patients have been established.

36. The Social Welfare Department (SWD) has taken proactive follow-up actions to provide the families with deceased SARS patients and/or recovered SARS patients with various support as and when necessary. Such support includes counselling, clinical psychological services, financial assistance, support groups, volunteer services, voluntary legal advisory services, housing assistance, and community support services.

Next Step

37. Solid progress has been made in the implementation of the recommendations of the EC Report. While some of the recommendations such as the organization review will need time to take forward having regard to the establishment of the CHP and the expansion of its functions in the longer term, other recommendations are being implemented on an on-going basis. The internal Task Force chaired by SHWF will continue to coordinate the implementation of the recommendations and report to the MC and to the Legislative Council on a regular basis.

Health, Welfare and Food Bureau
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