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Singapore GP Flu Pandemic Symposium

Hong Kong's Primary Care Influenza Pandemic Response Plan

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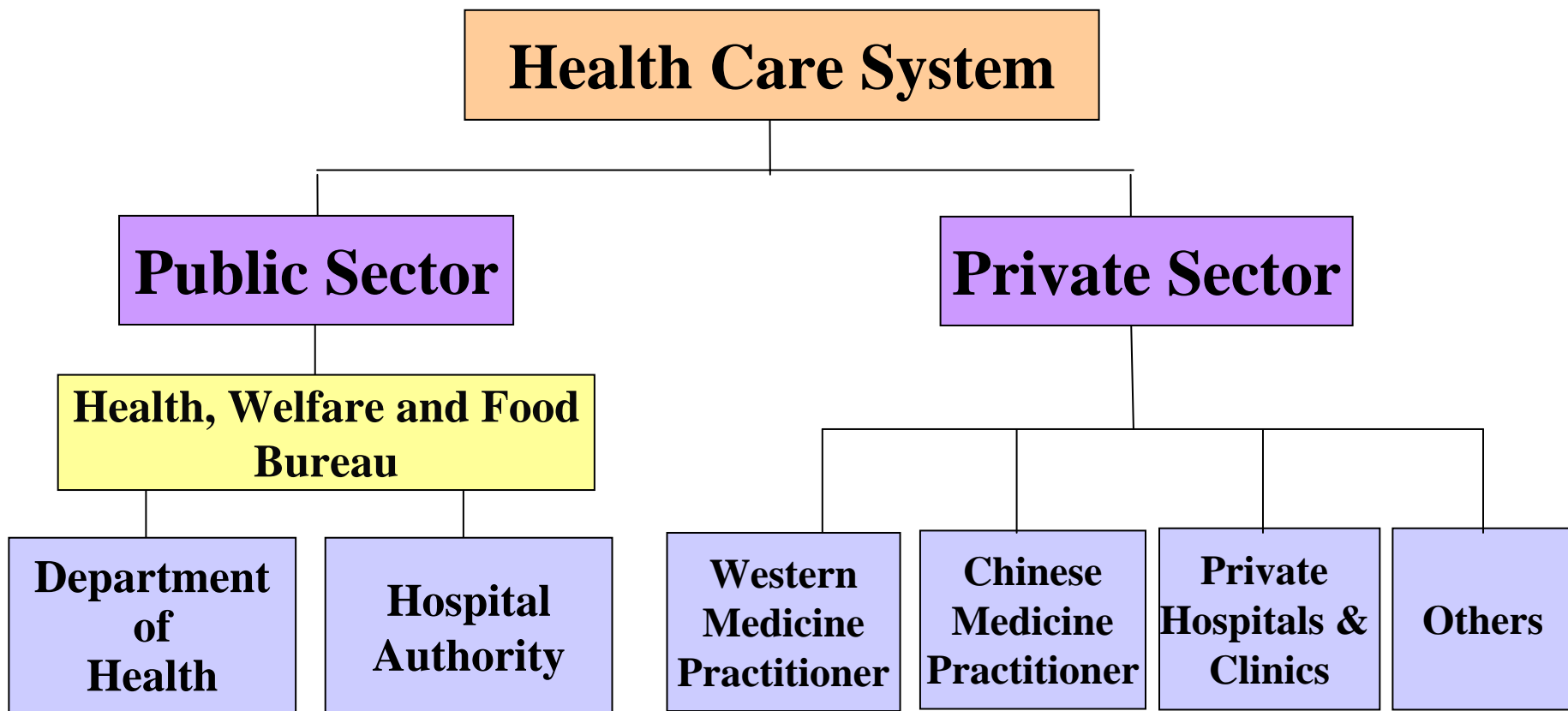
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Role of primary care in Hong Kong

- WHO:
 - "essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford."
- Primary health care is the first point of contact individuals and the family have with a continuing health care process
- Acts as a gatekeeper to the labour intensive and relatively expensive secondary and tertiary care
- Promotes health and wellness, minimizes the incidence of disease and disability.



Health Care System



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- **Government's health advisor and agency to execute health policies and statutory functions**
- **Safeguards the health of community through promotive, preventive, curative and rehabilitative services**



Landscape of primary health care

- include a range of promotive, preventive and curative services provided in health care institutions and in the community
- provided by the Department of Health (DH), the Hospital Authority (HA) and the private sector
 - Most of the promotive and preventive services are provided by the public sector.
 - For curative services, in terms of market share, private practitioners of Western medicine account for more than half of the consultations (56.5%).
- Private practitioners operate independently of the government and without subsidy
 - Most in solo practice
 - Fee-for-service basis.
 - Patients are free to choose any private practitioner: "doctor-shopping"
 - Practice of Family medicine is hitherto not common.



Scope of Primary Care Services



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Health Education

Family Health Service

Student Health Services

Elderly Health Services

Specialist Outpatient Services

General Outpatient Services

Day Hospital Services

Community Nursing , Psychiatry, Allied Health Services



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GP Practice during SARS

- Compared to Canada, Hong Kong GP were:
 - less likely to quarantine themselves (77.1% versus 19.4%, $P < 0.01$) or
 - more likely to wear a mask (52.7% versus 97.7%, $P = 0$) during consultation, having support staff to wear masks (68.6% versus 97.8%, $P = 0$)
 - and test patient's temperature (47.1% versus 68.1%, $P < 0.01$)

- Significant anxiety was found in family doctors. Three quarters of respondents recalled requesting more investigations while a quarter believed they had over-prescribed antibiotics.

1. [Wong SY et al.](#) Primary care physicians in Hong Kong and Canada--how did their practices differ during the SARS epidemic? *Fam Pract.* 2005 Aug;22(4):361-6
2. Wong WC. How did general practitioners protect themselves, their family, and staff during the SARS epidemic in Hong Kong? *J Epidemiol Community Health.* 2004 Mar;58(3):180-5.



Lessons from SARS for primary care

- Lack of communication & collaboration
- Private doctors were not sufficiently engaged during the epidemic
 - All SARS cases referred to public hospitals
 - Extra capacity in private sector for non-SARS cases not fully utilised
- Standards of infection control need to be raised

Five strategic principles for pandemic preparedness



- Reducing risk of human infections
- Early detection of pandemic influenza
- Enhancing emergency preparedness and response
- Fostering collaboration with the Mainland and international health authorities
- Rehabilitation support in post-pandemic phase

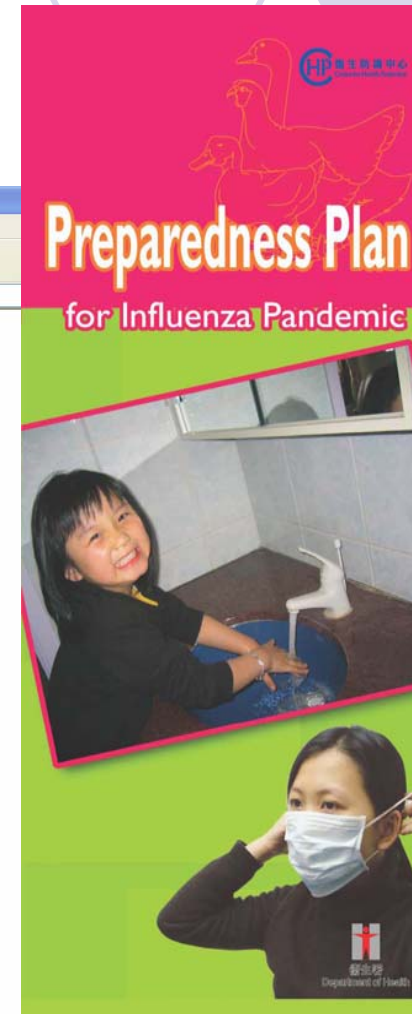


Contingency planning : Preparedness Plan for Influenza Pandemic



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The screenshot shows a Microsoft Internet Explorer browser window displaying the website of the Centre for Health Protection. The address bar shows the URL: http://www.chp.gov.hk/content.asp?lang=en&info_id=2267. The page title is "Government's Preparedness Plan for Influenza Pandemic". The main content area includes a date "2 February 2005" and a link to the "Framework of Government's Preparedness Plan for Influenza Pandemic (Jan 2005)". The left sidebar contains navigation links such as "Home", "About us", "Scientific Advisory Structure", "Risk Communication Advisory Group", "Health topics", "Data and statistics", "Guidelines, letters to institutions, reports and publications", "Training and events", "Health professionals", "Media room", "Related links", "Contact us", "e-Newsletter", and "Download tools". The bottom of the browser window shows the Windows taskbar with the system clock at 12:06.



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Pandemic Preparedness Planning assumptions

- 15% of local population will be infected as in 1968
 - **Flu pandemic: 1 – 3 waves**
 - **Each wave ~ 8 – 12 weeks**
 - **Several weeks to months separate each wave**
- Catastrophic health, societal and economic impacts
- Highly pathogenic avian influenza is likely potential candidate for pandemic influenza
 - Time for evolving into transmissible form
- Patients are infective before symptoms occur



Singapore DORSCON- "FLU" Alert Level	Hong Kong Three Tier Response Levels
Alert Green Level 0	<p>Alert</p> <p>(a) HPAI detected in poultry population outside HK OR inside HK in imported birds, wild birds in gardens/parks, pet shops or natural environment</p> <p>(b) Avian influenza human cases detected outside HK</p>
Alert Green Level 1	<p>Serious</p> <p>(a) HPAI detected in poultry in local retail, wholesale markets or farms</p> <p>(b) Avian influenza human cases detected in HK, but without evidence of efficient human to human transmission</p>
Alert Yellow	
Alert Orange	
Alert Red	<p>Emergency Response Level</p> <p>(a) When efficient human to human transmission occurred outside or inside HK</p> <p>(b) Influenza pandemic</p>
Alert Black	

Public health objectives

Alert Level

- To gather intelligence and prevent importation of diseases, and thus which mitigation and preparedness activities are centred.

Serious Level

- To identify foci of infection, eradicate the source if possible, limit transmission of the disease and prevent exportation.

Emergency Level

- To minimise mortality and mortality toll, and slow down progression of epidemic, and buy time for new interventions development.

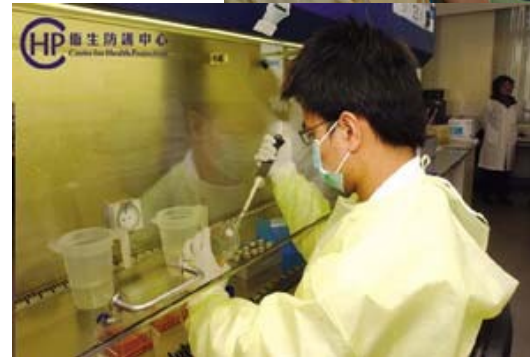


Ongoing Preparedness – Public Health Measures



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- Surveillance network (local and global)
- Investigation and control measures
- Laboratory support
- Infection control measures
- Antiviral stockpile
- Vaccination
- Port health measures
- Risk communication and public education



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Primary care response plan

Integrated public and private response
Transcends three-tiered response levels

Designated
Medical
Clinics

Public health
actions

- Epidemiological investigations
- Quarantine
- etc

Public

Private

Maintain
routine
service

Surge
capacity
pool

Interface:

Surveillance

Clinical Service reprovision

Infection Control Training

Risk Communication



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Surveillance

- Alert Response Level
 - Statutory notification
 - Sentinel surveillance
 - Laboratory surveillance
 - Voluntary reporting



Statutory Reporting

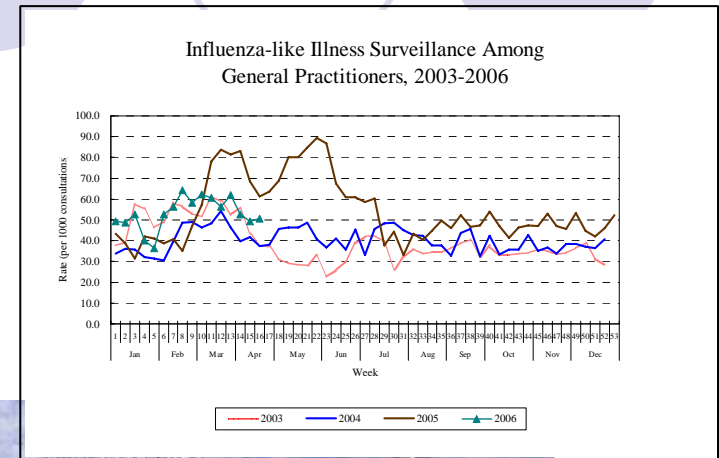
- Cap 141: Quarantine and Prevention of Disease Ordinance
- Influenza A (H5, H7, H9)
- Central Notification Office:
 - CENO on-line



Sentinel and Laboratory surveillance

- General outpatient clinics, private practitioners (solo) supplemented by elderly homes, child care centres

- Specimens collected sent to **Public Health Laboratory Centre**, a WHO- designated National Influenza Centre
 - Free-testing for suspected cases



Serious Response Level-Quarantine

- Purpose of Quarantine Centre
 - to facilitate monitoring of collateral/ close contact of people with confirmed/probable avian/ novel influenza;
 - to enable early detection and treatment; and
 - to reduce the risk of spread of avian/ novel influenza

- Set up of Medical Post in quarantine centre
 - to provide medical surveillance to residents

- Multidisciplinary team headed by primary care physician



Designated Clinics

- Purpose:

- to contain the spread of an avian influenza outbreak in the community during the early phase; and in the event of massive outbreak, to provide basic supportive treatment to citizens and to relieve the burden of hospitals



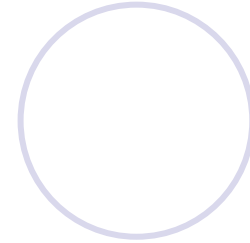
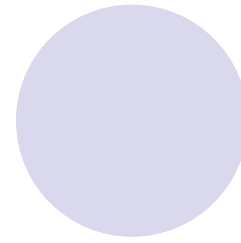
Designated Clinics –early phase

- Scenario:
 - local poultry spread or limited human to human transmission (ie. Serious Response Level and Early Phase of Emergency Response Level)
- The goals are:
 - to provide early detection and notification of human cases;
 - to avoid mixing of symptomatic patients with known contact history (to avian influenza or novel influenza viruses) with those patients suffering from other illnesses in order to contain or delay the spread of the disease); and
 - to avert a pandemic or buy time to work out subsequent pandemic response measures.

Designated Clinics – Later phase

- Scenario
 - when the spread of the avian influenza becomes inevitable and containment of a pandemic does not work
- The goals are:
 - to triage patients with influenza like illness (ILI);
 - to manage those patients with mild symptoms in order to reduce morbidity and mortality of citizens; and
 - to reduce overloading of hospital Accident & Emergency and inpatient services.

Implementation

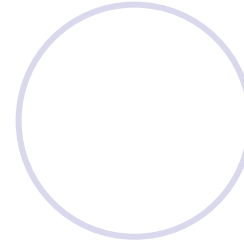
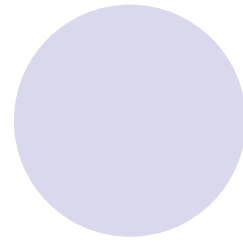
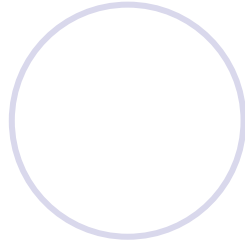
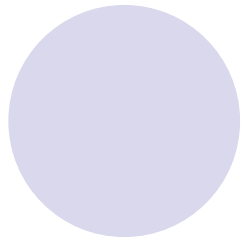


- On activation, a total of 18 designated clinics will operate in each of the 18 government constituent districts.
- Selection criteria:
 - clinic size
 - adequate infection control facilities
 - minimal effect on other co-existing healthcare services
 - access to the general public



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- The remaining GOPCs (non-designated ones) will only manage patients presenting with non-ILI episodic problems.
- Refill clinics:
 - All GOPC follow-up patients with chronic illnesses will be given repeated prescription in these clinics



Serious/ Emergency Response Level

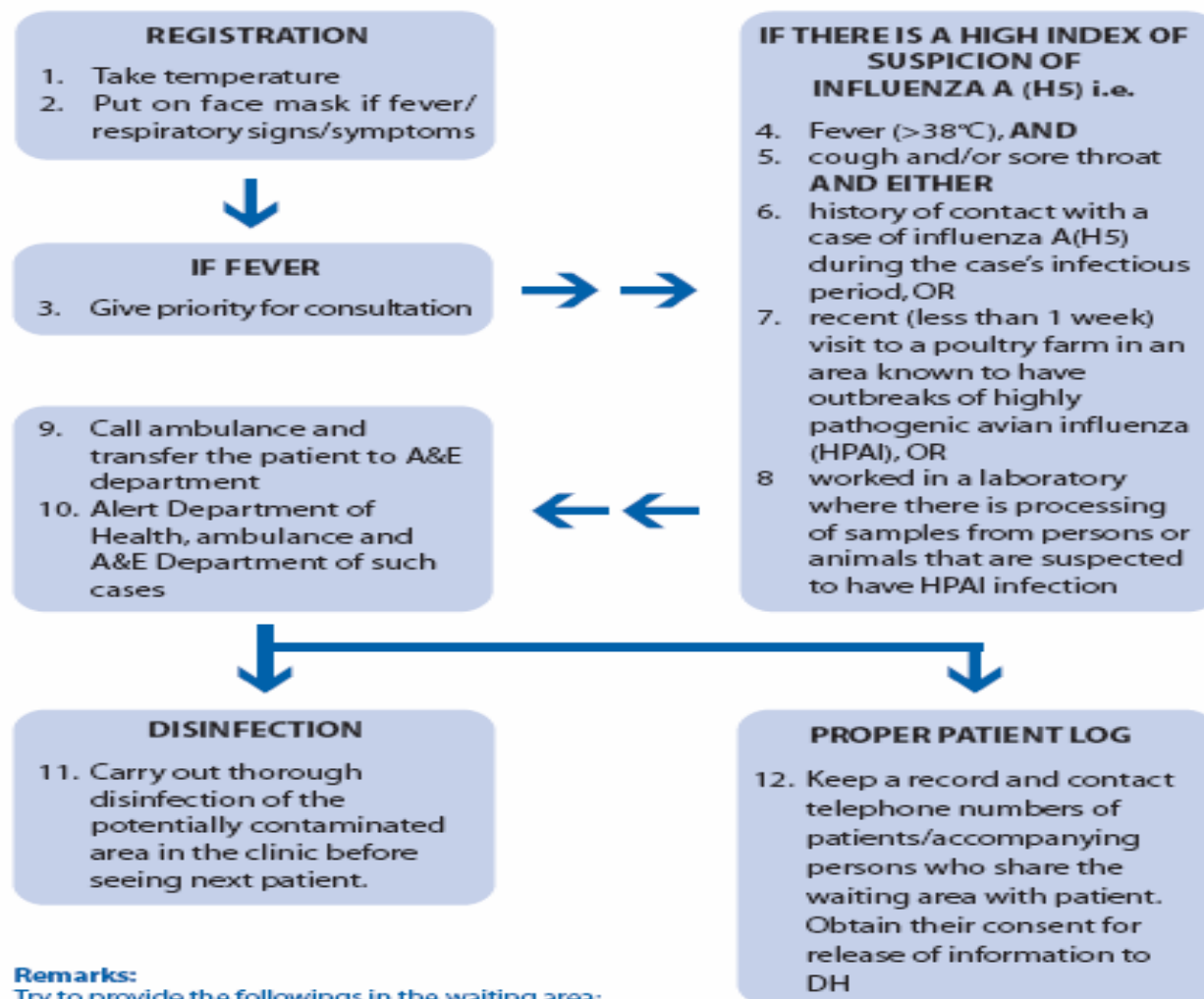
- Maintain routine services
- Public-private clinical services plan support public health actions



Referral guidelines for primary care



Appendix 3: Flow Chart of Recommended Consultation Procedure concerning influenza A (H5) in Private Clinic Setting



Remarks:

Try to provide the followings in the waiting area:

- Facilities for hand-washing or alcohol based hand scrub
- Facial tissue
- Waste bin with foot operated cover

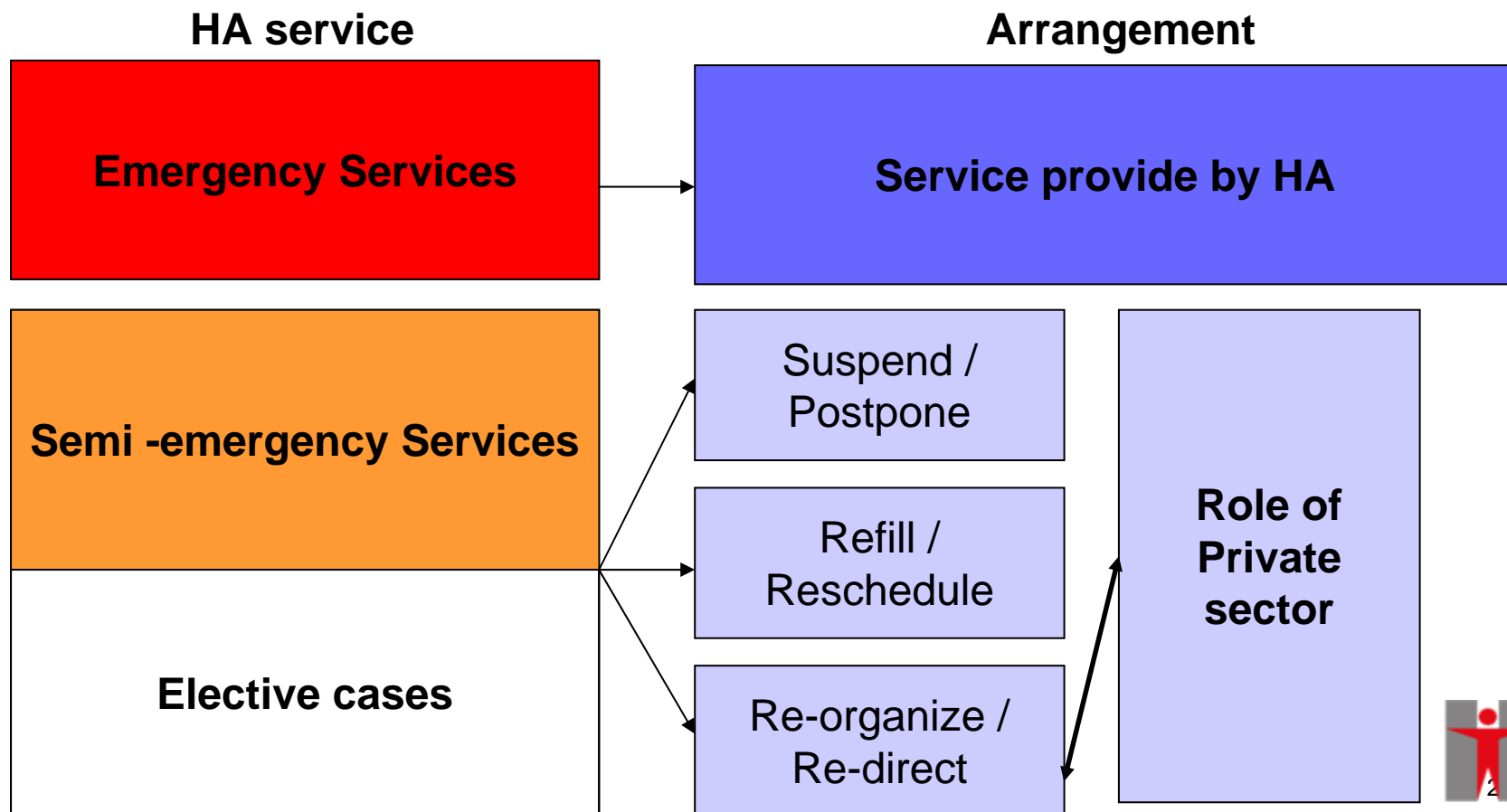
Last modified on 3 Feb 2004

Updates jointly promulgated by the Department of Health and The Hong Kong Medical Association



Public-private collaboration on clinical services

- Flu pandemic: 1 – 3 waves
- Each wave ~ 8 – 12 weeks
- Several weeks to months separate each wave

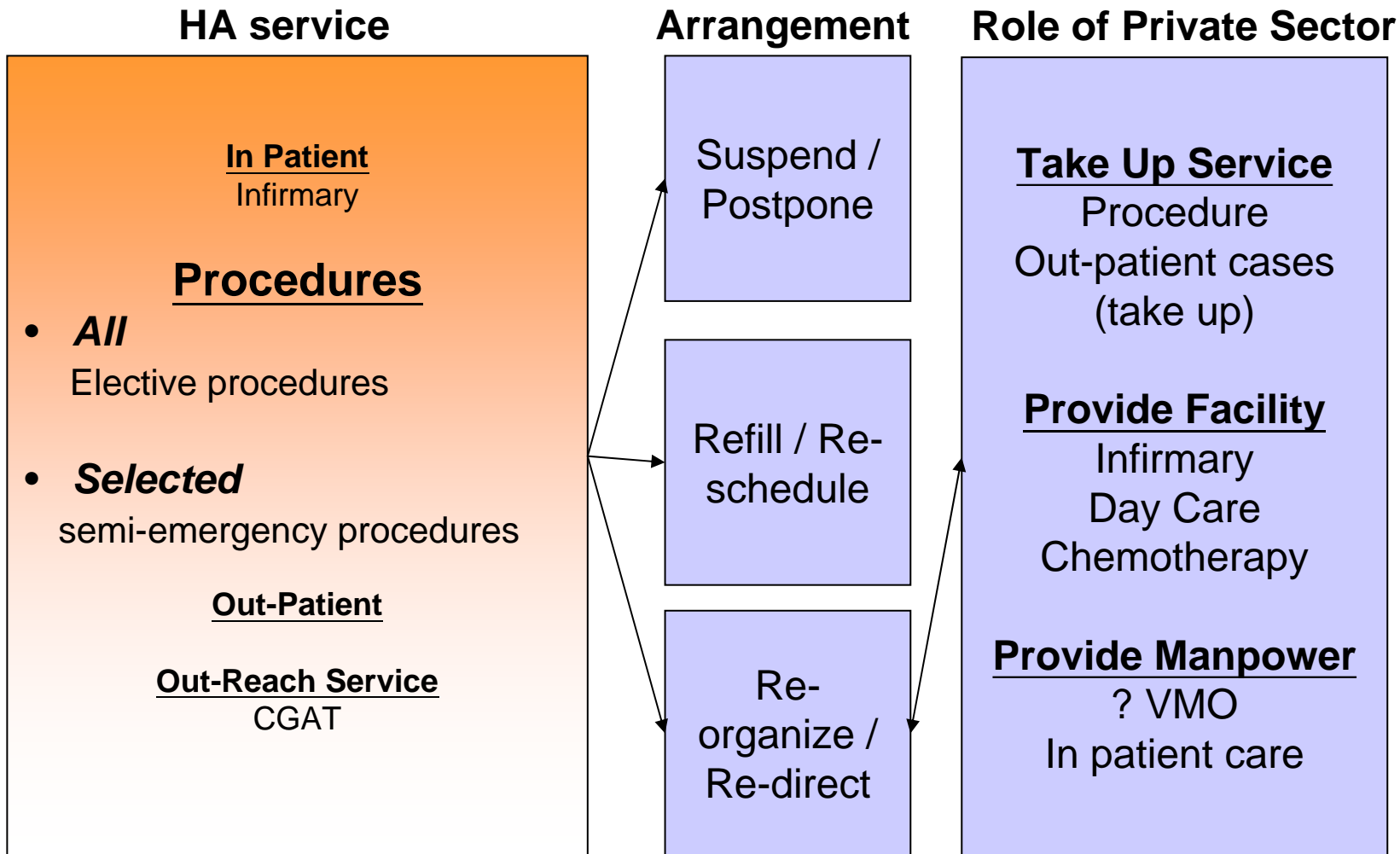


Risk Communication-Serious/Emergency response levels

- Daily press briefings
- Outbreak Intelligence Centre
- Emergency Response Centre
 - Information dissemination network



An Example: Medical/ Pediatrics/ Geriatrics/ Palliative services collaboration



Infection control enhancement

- Advice on stockpile
 - Antivirals, PPE
- Provision of resources
 - Infection control training
 - Infection control guidelines

Simulation Wards



Infection Control Training



遇到下列情況，必須遵守

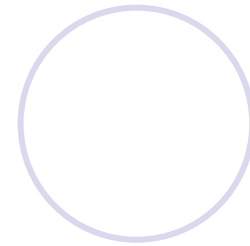
標準防護措施

Standard Precautions
must be taken in the following situations

接觸血液、體液、分泌物、排泄物、黏膜或傷口 必須戴上手套		Wear Gloves when handling blood, body fluids, secretions, excretions, mucus membrane or non-intact skin
若有可能接觸濺出血液或體液 必須戴上口罩、眼罩及穿上保護衣		Wear a Mask, Protective Eyewear and a Gown to protect yourself from splashed blood or body fluids
切勿套回已使用的針咀		No Recapping
小心處理針咀及利器		Handle Sharps Carefully
接觸血液、體液、分泌物、排泄物、黏膜、傷口，或除下手套後 應立即洗手		Wash Hands Immediately after taking off gloves or handling blood, body fluids, secretions, excretions, mucus membrane or non-intact skin



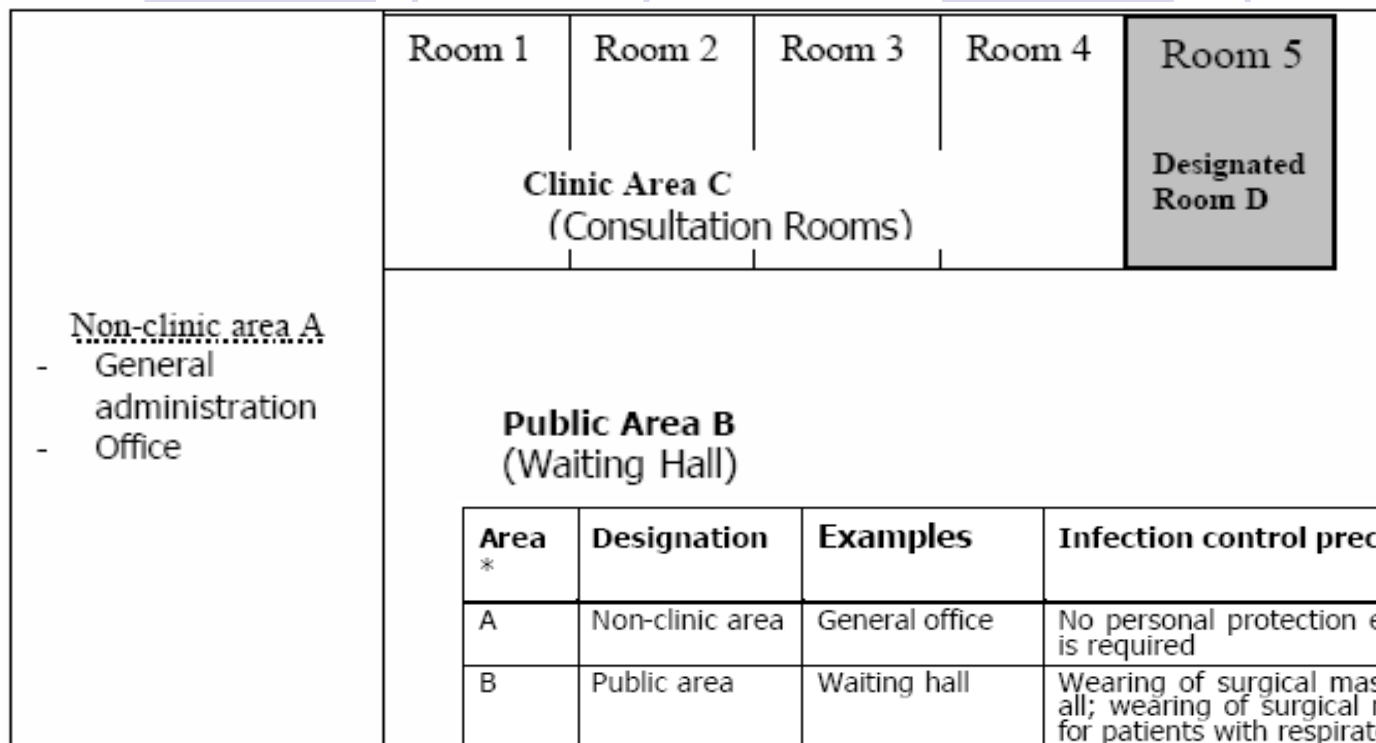
Specific IC Guidelines in Hospitals/Clinics



- Surgical mask
 - Must be worn in patient areas
 - Discarded after contamination or daily
 - Same mask should not be worn in non-clinic areas
- Handwashing
 - Mandatory after each patient contact, change of gloves/masks and gown/uniform/white coat
- Protective clothing
 - Use of PPE according to guideline



Example



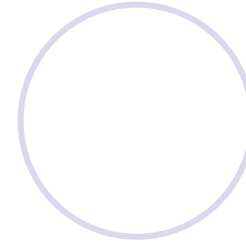
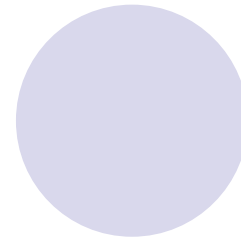
Area *	Designation	Examples	Infection control precautions
A	Non-clinic area	General office	No personal protection equipment (PPE) is required
B	Public area	Waiting hall	Wearing of surgical mask is advised for all; wearing of surgical mask is required for patients with respiratory symptoms or fever
C	Clinic area	Consultation room(s) where clinical procedures are carried out regularly	<u>Client:</u> Wearing of surgical mask is advised for all; wearing of surgical mask is required for patients with respiratory symptoms or fever <u>Staff:</u> Wearing of surgical mask and gown are required; other protections as required for respective procedures
D	Designated room	Selected room for managing suspected or probable patients with novel influenza	<u>Client:</u> Wearing of surgical mask is required <u>Staff:</u> Wearing of surgical mask and gown are required; N95 mask and other appropriate protections (e.g. gown and goggles) should be put on for high risk procedures; PPE should not be worn beyond the designated area

Source: Guidelines on Infection Control Practice in the Clinic Setting, ICC, DH



Surge Capacity

- Doctors
- Nurses
- Pharmacists
- Paramedical professionals
- Social Workers
- Non-governmental organisations



Volunteer Doctors Scheme

Aims

- To build up surge capacity of doctors to prepare for influenza pandemic.

Objectives

- To establish a mechanism for recruiting and mobilizing volunteer during public health emergencies.
- To provide training and support to volunteers recruited.
- To enhance public private collaboration and building network.



Survey findings

Types of support pledged by medical volunteers

- **Public Health Services**

- A. Participate in hotline services
- B. Participate in health talks / public education programmes
- C. Support vaccination teams
- D. Support DH in prescribing antivirals

- **Clinical Services**

- E. Attend general outpatient / specialist outpatient clinics
- F. Attend designated clinics
- G. Attend outreach medical services
- H. Clinical duties at HA hospitals
- I. Participate in hospital hotline service / pharmacy refill stations to answer medical enquiries
- J. Others

- Each doctor has to commit one area of support.

Most volunteers would like to support vaccination service, attend GOPC and prescribe antiviral.



Survey findings

Suggested areas of public / private collaboration

“Protocols for Outpatient Management”

“A central co-ordination Committee/Board to streamline & co-ordinate public & Private Medical Services”

“It is best to work serve in the area you work”

“Centralized Information Bureau so as to transfer information quickly / assess to patient progress / data”

“Keeping practitioners well informed before media announcements that we are ready for patients' queries”

“To share real-life patient management experience by broadcasting hourly change of patient's hourly bio-data and the corresponding treatment situation”



Drills & Exercises

- To review the effectiveness of contingency plans
 - Exercise MAPLE (Nov 2004)
 - Exercise CEDAR (Jul 2005)
 - Exercise POPLAR (Nov 2005)



Conclusion

- Primary care doctor is the first line of defence in disease epidemics
- Primary care response plan should be part and parcel of overall influenza pandemic planning
- Our key to success is an integrated response of public and private sectors on defined areas of collaboration





Thank you