

Minutes of PMH SARS Committee Meeting
8 April 2003

1. Admission and Patient Status

- PMH would no longer receive A&E referrals except from YCH and CMC.
- KWH was receiving own SARS patients as well as those from UCH.
- Special precautions should be taken in admitting elderly patients with SARS symptoms.
- Since no visit was allowed, the ward / ICU nurse should take initiative to inform patient's relatives about patient's condition.
- There should not be intubated patients on ventilator in general wards to reduce the risk of transmission of infection.

2. Infection Control

- Each hospital would set up a infection control network with infection control coordinator at 3 levels. Nomination of coordinators of each levels would be submitted by 12 April.
- All staff were required to attend compulsory infection control training course. Records for both clinical and non-clinical staff should be submitted by 12 April and 19 April respectively.
- Dr T K Ng would lead a team composed of Dr P L Liu and Mr Alexander Cheng would work out a detailed infection control network and implement it in PMH with surveillance. The team would revise guidelines on infection control standards for all departments.
- Staff were reminded not to eat in ward areas.
- Staff wearing a complete set of protective clothing (purple gown, plastic apron, goggle and mask) should not stay outside the wards.
- Hourly cleansing of ICU floor had been carried out daily.
- Awareness of protecting oneself should be observed by all ICU nurses especially in resuscitation room. All frontline staff should wear PPE properly before starting resuscitation.

3. ICU

- New ICU structure:
 - Dr K O Cheung – overall administration head
 - Dr Edward Ho – in charge of medical team
 - Mr Andrew Yeung – in charge of nursing team
 - Mr Alexander Cheng – infection control and assisting Mr Yeung on nursing aspects
 - Norman Chik – in-charge of coordination of all store and supply
 - Jocelyn Cho – in charge of all dirty items including out-going laundry, rubbish
 - Infection control measures would be strengthened to minimize staff infection.
 - DNR cases should not be sent to ICU.
 - Criteria were set for selecting SARS patients with potential deterioration conditions and requiring admission into ICU of other hospitals. 15 quotas were allotted to PMH and would be shared as follows:
 - 5 patients to QMH (Dr Leung Man Pò as the coordinator)
 - 5 patients to PYNEH (coordinator to be confirmed)
 - 5 patients to TMH (Dr Cheung Wai Lun as coordinator)
- An overall coordinator from PMH in this initiative would be designated.

- Patients should be informed of SARS treatment plan. Early treatment should be given in time to those patients who really required it.

4. Medical & Geriatrics

- The chronic patients on ventilators would be transferred to other hospitals as soon as possible, e.g. RH or GH.
- The key staff issues such as training, safety and rest days were being addressing.
- Professor Joseph Sung of PWH would be consulted for fine-tuning management plan used in PMH.
- BiPAP had been condemned for use in wards despite of its advantages in view of the risk of spreading aerosols. However, it could be used in an isolated room with negative pressure. Respiratory ward could be used as HDU to treat SARS patients.
- Patient on CAPD would be reminded to rinse the drainage bag with hypo 6 before disposal at home.

5. Paediatrics

- Non-SARS patients and SARS patients would not be kept in one ward.
- Relatives were being informed of patient's condition normally during the period from 3:00 pm to 4:30 pm.

6. Supply

- HAHO would supply new ventilators to PMH and organize related training courses for doctors and nurses
- Supplies and PPE would be provided in the following priority:
 1. ICU
 2. Wards with SARS patients
 3. Acute wards
 4. Less acute wards
- Infusion pump, physiological monitor and ventilators would be available by 9 April 03.
- 4 mobile X-ray machine would be available on loan from General Electricity. Time of delivery to be confirmed.
- PPE, linen and consumables would be topped up daily according to a regular quota without the need for wards to make requisitions.
- More sets of air-mate protective clothing and air filters would be distributed to SARS wards.
- Closed-lid rubbish bins would be supplied to wards.

7. Manpower

- Staff pregnant for less than 13 weeks could be granted special leave with pay
- Staff pregnant over 13 weeks would be posted at low risk areas
- Nursing manpower:
 - HK Polytechnic University graduates would be recruited in June as Technical Services Assistants but would not be posted to work at ICU.
 - 16 unregistered nurses of HK Polytechnic University would take up the role of HCA in PMH.
 - 39 external recruits would be posted at KWC hospitals.
 - OPD nurses would be deployed back to PMH.
 - 11 nurses from various hospitals of KWC would join PMH.
- Supporting staff:
 - Training on SARS precautions being provided

- Avoid using pressurized cleanser. Use mopping method instead.
- E&M staff would be informed to take precautions when performing high dusting
- Guidelines for high dusting would be formulated by Infection Control team

8. Cross-hospital coordination

- Ivy Tang of WTSH and Rebecca Tsui of PMH were appointed to coordinate patients transfer.
- Transfer of patient from PMH to WTSH had started on 7 April 2003.

9. Accommodations

- 124 rooms were provided for M&G, ICU and paediatrics medical staff
- 1100 beds in nursing quarters for nurses and other staff. Booking had been received from 1200 staff. More accommodation facilities were being sourced.
- Isolate room would be provided to staff with fever.

10. Others

- A new SARS reporting program using CMS would be in operation wef 9 April 03 noon for medical staff to enter information of SARS admitted cases. Such data would be used by Department of Health for tracing contacts and planning actions. Correct matching of ward code should accurately be observed.
- Dr Chow Chun Bong was the Vice-Chairman of SARS Committee and would chair the meeting in the absence of Dr Lily Chiu.
- A SARS Update would be prepared daily for circulation.
- All routine nursing observations for patients would be streamlined.

Minutes of PMH SARS Committee Meeting**9 April 2003****1. Admission and Patient Status**

- 6 HCW were admitted on 9.4.2003.

2. Infection Control

- All febrile hospital staff should consult doctor in A&E of PMH for medical treatment and sick leave certificate. They were allowed to work and could stay in sick bay. Daily follow-up was required.
- ICN team would inspect changing room, Nursing Quarters and staff canteen to identify potential sources of infection.
- All hospital staff had to attend training course on prevention of SARS infection at the CHRC as soon as possible.
- Social dinner gathering with known SARS contacts should be avoided. No talking when having meal.
- Staff should have tea-time individually to avoid group gathering.
- Strict surveillance of staff on implementation of infection control measures outside each ward would be reinforced.
- Mask should not be removed even inside the resting room.
- Eating was not allowed in ward pantry.
- Dirty gowns should be disposed properly inside the toilet.
- Exhaust fan would be installed in all wards including ELG1, ELG2 and EF wards.
- Air filters would be washed every 4 weeks instead of 6 weeks. It should be taken out of the ward in a plastic bag for washing.
- Shoe covers were not recommended for use because of its incomplete coverage.
- Shoes had to be changed before leaving ward and changing room.
- Only limited stock of face shields was available. Further supply would depend on HAHO's provision.
- Air-mate hoods would be supplied on 10 April 2003 and had to be worn in resuscitation. Teaching sessions would be arranged for users.
- Nasopharyngeal aspiration (NPA) was strictly forbidden in all wards.

3. ICU

- Rubbish bins were emptied every half hourly.
- When beds were fully occupied, isolated rooms with negative pressure in E5 would be used.
- N100 mask should be used for all ventilated cases.
- Ventilators would be distributed to ICU. Anaesthetic machine would be used as

a last resort.

- Ambu bag (bag-valve-mask unit) should never be used in ICU.
- A set of infection control guidelines on dress code and management of dirty linens had been formulated and implemented.

4. Medical & Geriatrics

- RH would take over 3 chronic patients on ventilator from PMH

5. Paediatrics

- Filter would be installed in all paediatric ventilators.

6. Supply

- N95 mask, surgical masks, gowns, face shields and OT trousers was adequately stocked for supply.

7. Manpower

- One doctor would be transferred from Lai King Building to PMH

8. Cross-hospital Coordination

- No further update.

9. Accommodations

- Three single beds were provided for each occupant in a bedroom. Space should be maintained between beds.
- Shower room and toilet would be washed hourly.
- Floor would be cleansed hourly.
- Rubbish bins would be emptied hourly.
- Exhaust fans would be installed in bathroom.
- Reserve of beds :
 - a. 24 beds for staff of WTSH (top priority)
 - b. 100 beds for YCH and CMC staff
 - c. 24 beds for staff of KWH
- Sick bay was located in Exciter
- Extra quarters for doctors were arranged at VTC of Ching Yee.

10. Others

- Resuscitation kits were available for use in wards of Main Block.
- Foreman could assist in calling policemen in case of such a need in handling particular situation.
- Pest control should be frequently reinforced in all places of hospital

Minutes of PMH SARS Committee Meeting
10 April 2003

1. Infection Control

- Infection control training course for nurses:
 - Nurses were being arranged to attend training courses. Each participant would get a relevant VCD. 1,800 VCD had been received from HAHO.
- Infection control training course for doctors:
 - Infection Control VCD
 - Infection Control guidelines and measures
- Further training packages provided according to staff deployment:
 - ICU module:
 - Teaching materials based on readings and web link information recommended by PWH.
 - Provided for anaesthetists and physicians with ICU background
 - SRS module:
 - 1 hour lecture on SRS
 - SRS treatment book
 - Non-SRS module: under development
 - Nursing modules included ICU care and infection control issues
 - Practicum would be arranged after the training modules were completed.
- Protective measures should be taken when the bag-valve-mask unit was used. After intubation, the EET should be connected to ventilator immediately.
- BiPAP could be used provided that it was used in a room with negative pressure with oxygen administration less than 50%. Staff had to wear protective gears.
- The minimum number of stay in hospital for SARS patients was 21 days. Upon discharge, patient was reminded to observe for any signs of recurrence of SARS attack.
- When SARS was confirmed, patient's close contacts would be quarantined for 21 days. Daily contact diary would be asked in history taking.
- Bedpan and urinals must not be kept at bedside after being used. It should be removed from bedside, disinfected and cleansed immediately using bedpan washer. Simply soaking the contents of bedpan with hypo 6 was not effective enough to kill the pathogens.

2. ICU

- Shortage in trained ICU nurses and doctors as well as increasing number of sick staff in Ward C2 and D2 entailed immediate resolution.
- Various options to cope with the need to open one more ICU wards had been discussed. Solutions included:
 - a. D2 patients would temporarily be transferred to A2.
 - b. Thorough cleansing of D2 would be carried out after evacuation.
 - c. EF1 would be closed for cleansing.
 - d. E5 would temporarily be used as ventilator ward.
 - e. 3 YCH A&E medical staff would be deployed to PMH and 4 admission wards at PMH would be reduced to 2 for opening of one more ICU ward.
 - f. M&G patients aged below 25 years old would be transferred to Paed wards to spare nurse manpower for ICU.

- g. Neurosurgical team and external recruits would be posted to work in A2.
- h. Deploying double trained nurses in KCH to LKB while transferring nurses from LKB to PMH would be explored.
- i. The nurses to be deployed to ICU would undergo a 3-day crash course.
- j. Open A2 on 14 April 2003 (Monday) for admission of ICU cases.
- k. Additional manpower would continue to be sourced from other clusters through HAHO.
- Dr K O Cheung would re-organize the medical staff and inform the members of the new structure. Nurses should be grouped on ward basis without the need to be mobilized among different wards.
- Dr K O Cheung and Mr Andrew Yeung were invited to join in every daily SARS Meeting. Dr P L Liu was asked to coordinate all infection control measures in ICU.
- More time allowance should be allowed for novice doctors and nurses to adapt to working environment of ICU.
- Respiratory team and external recruits had been posted to work in B2.
- Barrier would be set up at the end of the link footbridge between Main Block and ICU.

4. Supply

- Dr Edward Ho and Dr Chow Chun Bong would follow up the upgrading of ventilators with filters by Siemens.

5. Accommodations

- Air conditioners would be installed in newly renovated room.

6. Others

- HAHO would explore the use of Chinese Medicine in treatment of SARS cases as an alternative treatment.
- When using SARS reporting program of CMS, both data of suspected and confirmed cases should be entered. Dr Chow Chun Bong could be consulted in case query.
- All figures on infected cases should be aligned with DH information.

Minutes of PMH SARS Committee Meeting
11 April 2003

1. Patient Admission

- PMH would stop all admissions wef 11.4.2003. 3 types of existing admissions and its future arrangements:
 - From Medical Surveillance Centre of DH – to be referred to TMH.
 - From cluster hospitals (only highly suspected SARS cases):
 - a. CMC and YCH – to be referred to TMH
 - b. OLMH – to be referred to KWH
 - From 24-hour Staff Clinic at PMH – to be referred to QMH.

2. Infection Control

- It was proposed that ear temperature should be taken instead of oral temperature.
- Ward hygiene in ICU :
 - Hourly floor mopping and emptying rubbish bin
 - Leakage of clinical waste from red bag in ICU was observed and Admin would closely follow up.
- Infection control policy in ICU included:
 - Doors were opened.
 - Windows were closed.
 - Negative pressure in ward was maintained.
 - To ensure good quality of air in ICU, 4000 bacterial filters had been ordered. The filter would be connected to the expiratory end of each ventilator and Ambu/Laerdal bag which was used in bagging during the transportation of patients from D2 to A2.
 - The used Laerdal bag should be autoclaved whereas the method of disinfecting Ambu bag would be confirmed later.
 - Compulsory records of N95 fit test would be kept.
 - OSH staff would intervene by giving advice on OSH issues upon request.
- Three exhaust fans would be installed in ICU.

3. ICU

- 30 nurses would be added in nursing force of ICU, PMH, on 14.4.2003. They would undergo ICU training and were utilized to open A2 ward.
- All cluster hospitals would contribute 10% of its nursing manpower to ICU of PMH.
- 2-day crash course for all nurses would be started on 11.4.2003 afternoon for PMH and YCH nurse. Each class would accommodate 20 – 30 nurses. It would take 3 – 4 weeks to train all nurses working in PMH.
- The contents of the captioned course included mechanical ventilation and infection control policy.
- One more ICU ward (B2) would be opened on 15.4.2003.
- Basic guidelines would be prepared for trainers.
- Dr Chow Chun Bong would report the exact total number of ventilators (Newborn, children and adults) in PMH in the next meeting. Currently 69 ventilators were available for SARS patients. 10 more ventilators would be added next week.
- For all resuscitation, staff should take all precautions to protect themselves from getting SARS infection.

4. Medical & Geriatrics

- Patients of E5 were transferred to F4 which had been thoroughly cleansed.
- PMH patients in M&G would be transferred to PYNEH, TMH and QMH on 11.4.2003 using the allotted quota.
- For difficult intubations in M&G wards, ICU doctors or anesthetists could help during day-time upon special request.
- M&G nurses were advised to join the briefing session on respiratory care of SARS patients organized by PWH on 11.4.2003.
- One nurse specialist would be arranged to help M&G nurses set up ventilators and to brief on all aspects of infection control measures.

5. Accommodations

- If staff were suspected to have SARS, they would stay in sick bay located in Block D of KCH with body temperature taken q4h and follow-up daily.
- According to the new policy of home quarantine, HAHO stipulated that single bedroom should be provided for each staff. Despite the current situation overwhelming demand, Admin Dept would conduct exhaustive search for more quarters.

6. HR

- Deployment of staff to undertake ICU training course:
 - Nurses of 3 –5 closed M&G wards
 - Nurses of E5.
 - 30 nurses from other clusters
 - 38 returned O&G nurses
- All Unit supervisors should know the number and health status of their staff especially sick staff.
- Since mandatory 10-day home quarantine was implemented wef 11.4.2003, Dennis Wu and May Wong would take actions to show concerns and support to the hospitalized staff's families.
- TWGs would donate two recipes of Chinese medicine to doctors and nurses. The drug action claimed to protect oneself from getting SARS infection. This initiative was not under the auspices of HA. Hospital staff could get it from the Chinese Medicine Clinic of KWH free of charge. HR would coordinate the collection.
- HR would identify the needs of hospital staff which could be met using the donations from external parties in support and recognition of hospital staff's efforts in the SARS battle.
- In-depth discussion had been made on the plan of leave for staff working in SARS areas. Three options had been drawn:
 - '4-1-4': 4 weeks in SARS area, one week rest, 4 weeks in SARS area again
 - '4-2-1-4': 4 weeks in SARS area, 2 weeks in clean areas, 1 week rest and return to dirty area
 - '6-2': six weeks in dirty area and 2 weeks rest
- The special arrangements of staff leave were only applied to health care workers (doctor, nurses, HCA, supporting staff, etc) working in SARS areas.
- Different leave arrangements could be applied to different categories of health care workers.
- The issue of additional manpower needed to be addressed before any decision was made.

Minutes of PMH SARS Committee Meeting
14 April 2003

1. Infection Control

- All disposable gowns were waterproof if they were centrally purchased.
- BiPAP should only be used in a single room with negative pressure.
- Qualitative fit test on masks should be carried out properly in ICU with the assistance of Mr Sony So.
- P100 and N95 were negative pressure type of respirators. It could only be used in the presence of PAPR (powered air purifying respirator) for effective protection.
- N100 with self-protective valve should not be used in ICU.
- Ventilators without filters installed should not be used in ICU.
- The method of donning and removing of PPE should be treated with equal importance.

2. ICU

- Dr K O Cheung would return to CMC to prepare ICU ward for SARS admission.
- Ms Luisa Chan (ext.3750) was appointed to give executive support to Dr CC Luk in the overall management of ICU after the departure of K O Cheung.
- Upated ICU structure:
 - Dr C C Luk – overall management of ICU
 - Dr Tom Buckley – clinical administration team i/c
 - Dr M C Kung
 - Dr Edward Ho
 - Dr C K Ku
- Engineers from Head Office and EPD would inspect ICU for any improvement of air quality and working environment which should be safe and comfortable for staff.
- D2 would not be opened for use because of shortage of manpower. At present, only three ICU wards (A2, B2 and C2) were in operation.
- Dr Lai Shek To was appointed to be the overall in-charge of prioritizing cases for ICU care.
- HR would issue an ICU update to all staff on the changes and improvements made in ICU.
- A video on infection control guidelines and measures would be produced by Dr Liu and ICU of PWH and would be used for teaching purpose.
- Dr H W Liu visited ICU, D3 and general ward of PMH and gave suggestions for improvement.
- Dr P L Liu reported that a meeting had been held to form the structure of policing which would be submitted to Dr Chow for endorsement. Audit would be conducted on 16.4.2003 onwards using a check list to check uniformity, standard and compliancy of infection control precautions in all wards.
- Correct ETT suctioning using a closed suction system and changing ventilator tubing were strongly reinforced with regard to infection control precautions. Audit would be firstly performed in EF ward.
- 8 nurses came from other hospitals to PMH on 14 April 2003.
- Working hours of working staff were rescheduled as below :
 - 7:30 am – 2:30pm
 - 2:30 pm – 9:45pm
 - 9:45 pm – 7:30pm

Tea time and dinner would be combined so as to avoid frequent staff movement in and out of ICU.

- Tympanic thermometer would be used for taking body temperature.

3. Medical & Geriatrics

- F4 ward would be prepared for the receipt of returned patients from ICU and decanted patients from other hospitals.
- Potential deteriorating cases requiring ICU care would be selected and transferred to other hospitals for continual care immediately.
- Audit was conducted on early medical treatment for SARS cases in M&G.
- Dr K L Tong reported his study on medical treatment of SARS cases. It was conducted in response to mass media reports on late medical treatment and quarantine treatment. A survey was made on 99 patients who were admitted on past 10 days. The findings were:
 - within day 2 start Ribavirin and steroid : 82%
 - within day 3 start Ribavirin and steroid : 97%
 - more than 3 days start treatment resulted in admitting ICU
 - methylprednisolone : 58% with anti-pyretic effect
 - combined Ribavirin and steroid : nonresponsive in some patients
 These audit findings would be shared with COC and HAHO.

4. Accommodations

- The Government has secured 4 blocks of quarters in Tin Shui Wai, with a total of 4000 single rooms was available. 400 – 500 units with furniture were immediately available for occupation. King Hin Court was another place of accommodation with self-contained single rooms available.

5. A&E

- Dr Lit was asked to prepare a statistical summary of cases attended A&E daily and referral to QMH for admission and the work flow system.

6. Others

- Mechanical ventilator with positive pressure would be make available for
- A&E doctors.
- In CMS station:
 - for new admission, the term 'clinical SARS' was used instead of 'SARS'. According to DH, cases are regarded as SARS if there are epidemiological significance, e.g. Amoy case.
 - The data in CMS had to be updated daily before 8:00pm so that Head Office would prepare daily statistical report. All data should match with current patient's condition. This was not applied to WTSH where cases were assumed to be stable.
- Preventive measures of SARS had to be carried out in LKB and old age homes.
- Evacuation of SARS patients from ABCD wards to EF and wards cleansing would be carried out as the preparation for the receipt of usual patients when SARS was under control.
- Dr C B Law was assigned to monitor all infection control measures and audits of medical treatment with analysis.

Minutes of PMH SARS Committee Meeting
15 April 2003

1. Infection Control

- Ms Rebecca Tsui was coordinating clinical audits on compliance of infection control guidelines and policies.
- Infection control patrol would station outside the wards of each floor in Main Block and EF Block. He/she would supervise each staff to put on protective gears properly.
- Hospital staff had to follow the guidelines on the choice and use of PPE as recommended by the Head Office.
- N95 could be used with a surgical mask covering on it to reduce the contamination on its outer surface.

2. ICU

- Mr Alfred Sin, a representative of EMSD, PMH, reported his study on Ventilation System Modification at ICU of PMH. He proposed the following for improvement in AB and EF wards so as to protect staff:
 1. Build and keep the door of each cubicle closed so as to decrease turbulence flow.
 2. Air current of AB blocks would be improved to ensure negative pressure to avoid spreading of air from cubicle to staff areas and from staff area to outside ICU.
 3. Change the location of nurse station which should be placed inside the cubicle.
 4. Decrease human activities in corridor.
 5. Smoke test could be performed when improvement had been made.
- BiPAP could be used in E5 and E6 wards because of negative pressure setting. However, staff had to wear protective gears. Dr Chow Chun Bong and Dr Yu Wai Cho would make further study on this aspect.
- ICU Training Course for nurses was started on 15.4.2003 and in progress.
- Air-mate hoods were not recommended for emergency use but suitable for selective and planned care. It should be used with precautions including checking status of battery (no warning signs in battery failure), integrity of tubing and correct placement of tubing. It was recommended that goggles and mask should also be worn for extra protection when it was worn. 16 sets of air-mate hood would be sent to KWH, CMC and YCH whereas PMH received 34 sets. One set would be sent on loan to pathology when post-mortem was performed with Dr T K Ng consultation.
- Non-essential post-mortem should not be done to minimize infection.
- Ward Stewards were posted to work in ICU on rotation for 3 weeks wef 15.4.2003 because of shortage of clerical staff.

3. Medical & Geriatrics

- A period of time should be set aside daily for doctors to make phone contact with patient's relatives to update them on patient status.
- Logistics would be worked out for installation and operation of vide-conferencing for patients to communicate with their relatives in Main Block. Dr Chow Chun Bong would coordinate and follow up this initiative.
- Patients were transferred to QMH, PYNEH and WTSH as planned.
- F4 was used as step-down ward of ICU.

4. Accommodations

- Transport would be arranged by HAHO for staff residing in Tin Shui Wai.
- 300 residing capacity of King Tin Court would be shared by staff of PMH, UCH and WTSH. A person would be assigned to coordinate the booking of accommodation and transport in PMH.

5. A&E

- QMH refused to admit our referred case which they did not regard as highly suspected SARS case on 14.4.2003. Clarification would be made with QMH.
- Dr Albert Lit would closely monitor the SARS referrals from staff clinics/A&E and ensure that the patients would be screened by a senior doctor and regarded as highly suspected SARS case before making referral.

6. Paediatrics

- SARS in paediatrics were difficult to be diagnosed because of lack of symptoms. Patients would closely be monitored.

7. Others

- SARS data should be entered precisely and completely in CMS daily before 8:00 pm since the data would be utilized for discussion in the Directors' meeting every morning. Dr C C Ng would remind doctors of ICU to input data daily.
- Dr Tinsley agreed to send daily summary of SARS cases to Dr Chiu and Dr Chow Chun Bong.
- All temporary staff in CMC had been properly trained and briefed on infection control measures daily by supervisor, NO, DOM or WM in every unit.
- Temporary staff were entitled to free medical benefits because they were recognized as HA staff.
- Nancy would work with CHRD on handling of staff's application of no pay leave.
- Asthma should be seen as a reason for not working in SARS wards nor wearing N95 mask. Transfer to low-risk area could be considered on a case-by-case basis.

Minutes of PMH SARS Committee Meeting
16 April 2003

1. Infection Control

- 1.1 According to the information of DH, faecal-oral route was believed to be one of routes of transmission causing SARS. Dr T K Ng was asked to study the working mechanism of bedpan washer so that aerosolization with viruses during bedpan flushing could be prevented.
- 1.2 Supporting staff should be instructed to take extra precaution when emptying excreta in bedpan and urinals. Strict environmental hygiene should be observed in washing conveniences.
- 1.3 The toilet bowl should be covered during water flushing. Toilet and toilet seat should be disinfected more regularly. Toilet seat cover could be provided in staff toilets.
- 1.4 Any devices that could cause aerosols should not be used such as hand dryer and hair dryer.
- 1.5 Since cockroaches and mice were found harbouring viruses, pest control should be strictly reinforced.
- 1.6 Patient toilets should be furnished with paper hand towels. Nancy would source an appropriate tissue paper dispenser which did not require the user to touch its surface to get paper and could economize its usage.
- 1.7 Exhaust fan should be installed in sluice room.
- 1.8 The used disposable apron and gown should be removed slowly and folded with inside facing out. The infection control patrols in each floor should also watch closely on the proper disposal of these items.
- 1.9 All dirty gowns should be disposed at patient's bedside, not in lift lobby.
- 1.10 Dr C C Ng would explore the feasibility of opening windows in wards to promote ventilation especially WTSH.
- 1.11 Specimens of throat swab, urine and faeces should be collected on day 6 of admission for virus study (PCR). Swab sticks of throat swab and nasal swab should be kept in the same bottle containing transport medium before being sent to laboratory. This viral study had been done for paediatrics and geriatrics.
- 1.12 Separate PCR Centres in QEH and PMH were not encouraged by the Head Office.
- 1.13 If N95 did not pass fit-test for a particular staff, surgical mask could be used. For ICU staff, 3M half-face mask could also be used.
- 1.14 All hospitals should step up infection control measures and handle all patients especially elderly as if SARS cases. Strict vigilance on all preventive measures such as handwashing, wearing protective gears, adequate rest, increasing alertness of SARS should be maintained at all times.

2. ICU

- 2.1 Building of doors in cubicles of ICU was postponed to allow more discussion among ICU staff and EMSD engineers. Dr C C Ng would follow-up this issue.
- 2.2 The main door at the ward entrance was being closed whereas the outer door leading to lift lobby opened.
- 2.3 3 wards were in operation with a total of 40 beds. The 4th ward would be used as buffer.
- 2.4 One more day-off per week would be granted to ICU staff.

3. Medical & Geriatrics

Dr Lai Shek To would investigate the rationale of transferring a patient back from WTSH to PMH in 15.4.2003 evening. Such action could impose a great risk on ambulancemen and should be minimized.

4. Accommodations

HAHO had appointed two hostel managers who would be responsible for dealing with all accommodation related matters in Tin Shui Wai and King Tin Court. Nancy would work out the booking logistics. Each staff would get a door key on site.

5. A&E

- 5.1 If a discharged SARS patient develops fever before the due date for follow-up, the patient should seek appropriate medical attention as the general public.
- 5.2 For the venue of follow-up of discharged SARS patient, A&E should be the first choice in order to avoid the potential of cross infection to other non-SARS patients in SOPD area (Block K). M&G and A&E should work out the arrangements.

6. Paediatrics

For non-SARS paediatric cases, patients should attend paediatric OPD.

7. Others

- 7.1 In-depth analysis on SARS treatment had been carried out by HAHO.
- 7.2 New suspected SARS cases in YCH should be transferred to TMH. If TMH was full, cases should be transferred to PMH.
- 7.3 Since YCH was located very close to residential buildings, it would be the last resort for treating confirmed SARS cases. However, contingency plan should be prepared for the possibility of admitting SARS patients. Staff training on infection control measures should be conducted for all grades of staff including supporting staff. Members of the District Council had requested to be informed before SARS cases were admitted to YCH.
- 7.4 和記固網 would set up video-conferencing network in EF blocks after cleaning.
- 7.5 Ribavirin would be administered prophylactically to a staff with his/her consent if she/he had performed a procedure with high risk of SARS contamination despite all preventive measures had been taken.

Minutes of PMH SARS Committee Meeting
17 April 2003

1. Infection Control

- 1.1 Flushing of toilet and washing of bedpan /urinals manually was extremely risky tasks and should be avoided.
- 1.2 Toilet seat cover would be installed at each toilet bowl in the toilets of all cluster hospitals. Slow-releasing chlorine tablets for disinfection would be sourced for placing in flushing reservoirs of toilet flushing system. Ms Nancy Chow would coordinate.
- 1.3 No SARS patients should be admitted to the ward with a dysfunctional bedpan washer.
- 1.4 A panel led by Ms Liu Sau Tung would check hospital ventilation system and give advice.
- 1.5 In close contact with a convalescent patient, staff should wear a water-repellant disposable gown with a plastic apron outside. Ms Nancy Chow would contact the recommended manufacturer /supplier of water repellent protective gowns in China.
- 1.6 Ms Nancy Chow would update the instructions on cleaning procedures.
- 1.7 Staff were allowed to wear half-face mask if their N95 ('duck beak') did not pass the fit-test. However, it should not be used when performing SARS high-risk task. Ms Nancy Chow would source more models for trials with the Head Office's approval.
- 1.8 10 full-face masks with filter were donated by the Fire Services Department for N95-unfit users. Staff could approach Ms Nancy Chow to get one for trial.

2. Medical & Geriatrics

- 2.1 Dr Tong Kwok Lung would deploy members from Dr Chan Yuk Choi's team to KWH where SARS cases were increasing.
- 2.2 Since there was a relapse case of SARS transferred from WTSH back to PMH, Dr Lai Shek To would prepare a case summary report of this relapse case and send it to Dr Vivian Wong who would consult experts on any need to revise the guidelines on SARS patients discharge criteria.
- 2.3 PMH would admit suspected SARS cases when TMH was full in admitting A&E cases from YCH. M&G doctors in PMH would be consulted first before admission.

3. Patient Admission and Data Management

- 3.1 Non-SARS patients should not be admitted into SARS wards because they would become contacts of SARS patients and thus required to be quarantined for 21 days.
- 3.2 A template on summary figures for SARS patients was tabled and discussed. The accuracy of data was crucial because it was used for official announcement.
- 3.3 'New admission' referred to cases newly admitted via A&E. WTSH should not have new admission.
- 3.4 'Suspect with treatment' meant Ribavirin was started for a suspected SARS patient with fever and CXR changes. It was a potential SARS case and DH would take actions even the doctor had not yet confirmed it.
- 3.5 DH would not take action for 'suspect' cases.

- 3.6 The column of 'Status (i.e. addition of suspect, suspect with treatment, and clinical SARS)' referred to the total number of SARS in-patients. The figures under the column of 'Condition (i.e. ICU, ventilated and convalescent)' should also be included in the column of 'Status'. Therefore, in acute hospitals such as PMH and KWH, 'convalescent' should be zero. It was applicable to WTSH only in KWC. For YCH, only 'suspect' cases existed.
- 3.7 Non-SARS ICU cases should not be counted as SARS ICU cases.
- 3.8 Dr C C Luk, Dr C B Chow and Dr Jammy Kwong would brief the respective clinicians on the correct input of data in CMS.
- 3.9 'Convalescent' included afebrile for 48 hours, and improvements shown in previous abnormal laboratory tests and radiological findings.
- 3.10 Details of recommendations and decisions were available in HA website. For further information, Dr Liu Hing Wing and Dr Vivian Wong could be consulted.

4. Staff Clinic

- 4.1 All staff attended were 'contacts' of SARS.
- 4.2 If a staff had fever but without other obvious SARS symptoms, he/she was advised to stay at sick bay or self-quarantine with daily follow-up until symptoms of SARS became obvious, e.g. CXR changes. Only until then should the staff be admitted as 'suspect' case.

5. Patient Discharge

- 5.1 Revised guidelines for patient discharge:
 - a. SARS fulfilling case definition and suspected SARS
 - should be cohorted in a hospital or similar setting for at least 5 days from convalescence.
 - precautionary measures should be adopted for at least 10 days from discharge
 - b. Cases admitted to SARS ward, but subsequently diagnosed as non-SARS
 - should be managed according to clinical condition
 - precautionary measures should be adopted for at least 10 days from discharge
 - follow-up in DMC of DH and/or hospitalization for clinical condition was required
 - 2 weeks sick leave should be granted as confinement after discharge
- 5.2 HCE would inform their own clinicians about the change in guidelines.

6. Psycho-social Support for In-patients and Relatives

- 6.1 A more proactive approach to offer psycho-social assistance to the SARS patients and their relatives should be adopted. SWD was ready to organize their MSWs to provide better support. Clinical staff and MSWs should closely work together and take initiative to offer assistance to patients' relatives. Patient's information should regularly be provided to MSWs for follow-up actions.
- 6.2 Ms Adela Lai and Mr Michael Lok, PRO of PMH would liaise with the MSWs to work out the mechanism. KWH, CMC and YCH should adopt the same approach.
- 6.3 Flexibility should be allowed for the relatives to visit their patients if their condition deteriorated significantly. The relatives should wear all necessary protective gears during their visits.

- 6.4 For those patients who could not phone their relatives, clinical staff should contact the relatives to give them a brief update of the patients' condition everyday.

7. Accommodations

Guidelines for accommodation:

- Only staff working in SARS areas were entitled to accommodation.
- One room should be occupied by one person only.
- The room key would be kept by the occupant.
- The occupant was responsible for bedmaking and room cleansing.
- The room allocated was supposed to be used by the occupant on a daily basis. Occupancy of each room would be checked and recorded regularly. The occupant's right to use the room might cease if the room was found not being used regularly.

8. Others

- 8.1 With the sponsor of external organizations, the Public Affair Section of the Head Office would set up an audio-visual system in CHRC, NQ, ACC Day Surgery, Staff Canteen, 1/F Sitting Room of NQ and Office of Central Supporting Services for showing HA in-house AV productions. This system would also be implemented at PYNEH and PWH. Ms Charlene Kong is coordinating this project.
- 8.2 Ms Nancy Chow would coordinate with all relevant departments on the plans of ward cleansing, installation of 和記固網 network conduits and reopening of suspended services in PMH. Progress would be reviewed in the next meeting.
- 8.3 Provision of Chinese medication to staff:
- 抗毒保肺劑 would be supplied by Professor Leung Ping Chung, Chinese Medicine Research Centre for 1,000 PMH staff. Each consent subject had to complete a questionnaire prior to treatment. 50 voluntary subjects would conduct blood test after treatment. Mr Andy Lo would coordinate this initiative. A briefing session would be held on 22 April 2003.
 - 2 Chinese medication formulae would be supplied by TWGH to PMH staff. The users had to conduct a self-assessment to identify which formula would suit them better. Mr Andy Lo would be coordinating the arrangement.
 - Any staff would like to attempt should be reminded to take only one of the above medications.

Minutes of PMH SARS Committee Meeting
22 April 2003

1. Messages from CE of HKSAR

- 1.1 Mr Tung Chee Hwa, CE of the HKSAR, announced that the Government had decided to establish a fund of 200 millions to:
 - Support the professional training and development of the healthcare workers
 - Provide assistance to the sick staff
 - Support healthcare workers to fight against SARS
- 1.2 2 targets were set for HA by Mr Tung:
 - No more staff infected
 - Daily SARS cases less than 10
- 1.3 Mr Tung stressed that 「香港的存亡靠我們」 「要從嚴做」 and reiterated that the prosperity of Hong Kong and reestablishment of the citizens' confidence depended on the successful control of SARS.
- 1.4 All COSs and DOMs should convey the message of Mr Tung to their frontline staff.

2. Infection Control

2.1 PPE:

- 2.1.1 HA had adequate stock of PPE to supply to frontline staff. Goggle, cap, mask, face shield, disposable gowns, etc remained to be standard PPE. Ms Nancy Chow should ensure adequate supply of standard PPE to wards at all time. DOMs and WMs should ensure availability and accessibility of standard PPE to staff whenever they needed them. WMs must check their availability everyday and raise timely request in case of perceived shortage. Any complaint about inadequate supply would be thoroughly investigated.
- 2.1.2 Dr T K Ng and P L Liu should lead a team of Infection Control Patrols to conduct surprise checks everyday on ward staff's compliance with the right usage of PPE. The audit form prepared by Ms Rebecca Tsui would be used.
- 2.1.3 Dr P L Liu would give practical advice to frontline staff on the correct method of disinfecting the used goggles.
- 2.1.4 Priority would be given to staff of ICU and F4 in provision of special PPE, such as N100 mask, full-face or half-face masks, etc, if fit-test was not passed.

2.2 Infection Precautions:

- 2.2.1 At least a distance of 3 feet should be maintained between 2 SARS beds in KWC hospitals. Subacute patients could be decanted to LKB of PMH to spare space at other hospital sites.
- 2.2.2 Medical records should be covered by a plastic sheet and should not be kept at bedside. Dr T K Ng should suggest an effective way to disinfect the records before it was used.
- 2.2.3 Chlorine granules would be placed in the water tanks of the toilets to disinfect the flushing system.
- 2.2.4 ASD was requested to check and cleanse the sewage system in PMH thoroughly. Other KWC hospitals were also informed to take the similar actions.
- 2.2.5 Each toilet would be manned by one staff, who was responsible for the cleansing duties of the particular toilet.

- 2.2.6 All PMH toilets had been checked for seat covers. Other KWC hospitals had also been informed to take the same action.
 - 2.2.7 The material of the lid of bedpan washer would be changed to stainless steel.
 - 2.2.8 Paper hand towel dispensers had been installed in every ward toilet.
 - 2.2.9 Electric current of hand dryers would be disabled to ensure that it could not be used.
 - 2.2.10 Spraying of insecticide would be carried out at all places of PMH except ICU and SARS wards.
 - 2.2.11 Ms Nancy Chow would arrange thorough cleansing of the whole EF block including air-conditioners, piping, water tank and pest control.
 - 2.2.12 Ms Liu Sau Tung would visit PMH at 4:40 pm on 22 April 2003 to give advice on a safe working environment.
- 2.3 Education:
- 2.3.1 There was an increasing trend of incidents of HCA or supporting staff suffering from SARS. Ms Nancy Chow had regularly been conducting a 15-minute briefing to staff. To better protect these frontline staff, an infection control patrol should be designated to educate and remind them of the importance of using PPE properly everyday before starting to work. Similar measures should also be carried out for those workers in kitchen and Record Office.
 - 2.3.2 Dr Liu Hing Wing would conduct a sharing session on infection control measures from 6:00 pm to 7:00 pm at M/F Seminar Room, HAHO on 22 and 23 April 2003. All staff were welcomed.

3. ICU

- 3.1 An ICU training course commenced on 22 April 2003 with 53 participants.
- 3.2 All expiratory gas from ventilators would escape through a closed circuit system.
- 3.3 Since PMH still had around 30 SARS patients in ICU, the ICU nurses from other hospitals would continue to stay at PMH for some time until their parent hospitals demonstrated a significant need for them to return.
- 3.4 Psycho-social needs of relatives:
 - A named doctor, WM or NO should be designated to phone a named relative everyday to give an update on the patient's condition.
 - Visit could be allowed in case of deterioration of patient condition provided that the relatives put on all necessary protective gears.

4. Medical & Geriatrics

Close observation should be made on the referred cases from OAH blacklisted and full infection control precautions should be taken. These elderly patients would present with atypical signs and symptoms of SARS.

5. Patient Admission / Staff Clinic

- 5.1 In view of the accuracy to make diagnosis of SARS in A&E, it was suggested that admitted patients should be divided into 3 groups namely URI fever, suspected SARS and SARS confirmed. Patient should then be admitted into the relevant ward based on clinical presentations.
- 5.2 Staff Clinic at PMH A&E was predominantly a SARS Clinic and was meant to provide medical consultation service to PMH and KCH staff only, and not their family members.

6. Clinical Management

- 6.1 Ribavirin and Steroid continued to be standard treatment of SARS. Use of any other alternative treatment should follow the centrally coordinated protocol and with endorsement from the Ethnic Committee before drug administration.
- 6.2 The use of BiPAP could reduce the necessity of intubation and was indicated in patients with early oxygen desaturation. It must be used in a room or a tent with negative pressure, and would be used on trial in E5 and E6 of PMH.

7. Accommodations

- 7.1 350 rooms in Tin Shui Wai Quarters were provided for staff of PMH, CMC, YCH, KWH and WTSH. The deadline of application for PMH will be on 24 April 2003. First priority would be given to those staff working in ICU and SARS wards. Another 100 rooms were given to TMH and PWH each. PMH would use the quota of 100 rooms which were originally allotted to PWH.
- 7.2 300 rooms in Diamond Hill Quarters would be available. Sharing among hospitals was yet to be sorted out. Besides, KWH had 100 rooms, CMC 87 rooms and YCH 5 rooms at their own quarters.
- 7.3 Transport would be provided by the Kowloon Motor Bus Company Ltd for the tours between PMH and Tin Shui Wai as well as PMH and Diamond Hill. Transport between PMH and other KWC hospitals had to be arranged by the staff themselves if required.
- 7.4 Unoccupancy of any room for consecutive 2 nights would lead to forfeiture of the right to use the room and accordingly the staff would have to move out of it.
- 7.5 An isolation room would be provided to any newly discharged staff suffering from SARS for 10 days upon request.

8. Ward Movement

- 8.1 Ms Rebecca Tsui reported that patients would be moved from B2 to D2 whilst EF3 and EF6 would be evacuated.
- 8.2 Patients at EF wards would temporarily move to ABCD wards to allow EF wards for thorough cleansing.

9. Others

- 9.1 The plan to install network conduit in EF Block would need to be further reviewed. The installation workers should preferably be arranged to complete all works in one go.
- 9.2 Call bells were installed at the entrance of ABCD wards.
- 9.3 Donation of any kind from the public should be directed to Dr Ko Wing Man and would be registered in a central "donation account".
- 9.4 The subsequent SARS Meetings for this week would be held on 24 April (and 26 April if necessary). From next week onwards, the meeting would normally be conducted on Mondays, Wednesdays and Fridays.

Minutes of PMH SARS Committee Meeting
24 April 2003

1. Infection Control

- 1.1 If fit-test of N95 did not pass, half-face mask (instead of N100) would be provided. The filter should preferably be changed after being used for 3 to 7 days.
- 1.2 The battery of air mate hood could only last for 3 hours. Users had to beware of the battery level before and when wearing it.
- 1.3 Contacts of a SARS infected staff in CMC would be searched exhaustively. These staff were arranged on quarantined (special) leave with follow-up and body temperature taking everyday.
- 1.4 The toilets in SARS wards would be cleansed every hour during the high usage hours, which Ms Nancy Chow would separately agree with the ward management.
- 1.5 Bedpan washer at EF1 had been repaired. All bedpan washers should be checked for any leakage. Disposable bedpan must not be used for the sake of environmental protection.
- 1.6 EF block would be decanted for cleansing and replacement of sewage piping in the following week. Detailed arrangement would separately be announced.

2. ICU

- 2.1 Infection control, work standard and internal communication had significantly been improved.
- 2.2 No more ICU staff got infected in the past 10 days.
- 2.3 With the reduced number of ICU patients, the number of wards would be reduced to two. Plans were being made to rotate doctors and nurses out and in.
- 2.4 One nurse was designated to conduct daily inspection on compliance with infection control measures.

3. Medical & Geriatrics

- 3.1 47 CIWL and 54 local infirmity patients would be transferred from YCH to PMH by 26 April 03.
- 3.2 2 more wards at LKB would be opened to accommodate the patients from YCH.

4. Patient Admission

Arrangement would be made to admit the febrile child to a fever ward at YCH. A team of doctors and nurses from PMH would provide ward consultation at YCH.

5. Accommodation

Dr Kathleen So, Director (PS & HR), HAHO had made a request to the Government for 10,000 rooms for HA staff, pending the Government's confirmation.

6. Others

- 6.1 The Government had invited two TCM doctors from Guongzhou to station at KWH to treat SARS patients.
- 6.2 All SARS related expenditure should be properly documented for future audit.
- 6.3 100 cassette-tape recorders and 4 digital camera were donated to the hospital. These donated devices would be used to enhance communication between patients and their relatives.
- 6.4 EF5 would be used as isolation wards whereas EF4 as isolation ICU (or HDU). 4 local exhaust fans would be installed in the cubicles of each ward.
- 6.5 Security vigilance should be maintained at all times in changing room and wards.
- 6.6 Attention should be paid to refuse collection spots where medical wastes must be kept in red bags and locked.
- 6.7 The date of the next SARS meeting would be confirmed later.