For Information
On 11 June 2007

Legislative Council Panel on Health Services

Mortuaries in Public Hospitals

Purpose

This paper briefs Members on the investigation findings of the Hospital Authority (HA) in respect of the mortuary incident at Prince of Wales Hospital (PWH) and the improvement measures to be taken by the HA to prevent recurrence of similar incidents in future.

Background

2. At the meeting of the Panel on Health Services (the Panel) on 16 April 2007, the Administration and the HA briefed Members on the system in place regarding the operation of mortuaries in public hospitals and provided a preliminary account of the mortuary incident at the PWH vide LC Paper No. CB(2) 1587/06-07(02). In sum, the body of an 88 year-old deceased patient was wrongly released to another family of a 77 year-old deceased patient on 29 March 2007. The incident was discovered on 11 April 2007, when family members of the 88 year-old deceased patient came to collect his body from the PWH mortuary and the body was found to be missing. The HA immediately launched an investigation to determine the cause of the incident, review the procedures for the identification of the bodies of deceased patients and their release to family members, and identify areas for improvement.

3. The HA's investigation into the PWH mortuary incident was concluded in May and the findings are set out in paragraph 5 and the Annex. At the meeting on 16 April 2007, Members also requested additional information on the following :

(a) number and percentage of mortuary compartments containing two bodies in each public hospital concerned;

(b) projected demand for capacity of mortuaries in public hospitals in the coming 10-15 years;

(c) interim contingency measures to tackle the problem of inadequate

capacity of mortuaries in public hospitals; and

(d) long-term measures to tackle the problem of inadequate mortuary capacity and timetable for implementing such.

Investigation of the PWH Mortuary Incident

4. Immediately after the incident, the HA has set up an Investigation Panel to investigate into the incident, examine the current procedures on the identification and release of bodies, and identify areas for improvement. The Investigation Panel completed a report on its findings and submitted the investigation report to the Health, Welfare and Food Bureau on 17 May 2007.

Findings of the Investigation of the PWH mortuary incident

5. The Investigation Panel concluded that the principal cause of the unfortunate mix-up of the bodies of two deceased patients was human errors. It was found that the mortuary attendant who released the body of the 88 year-old deceased patient failed to follow the proper procedures for body collection and identification, when he retrieved the body from the storage compartment. He did not take the Collection of Remains Notice along to the storage area and verify the identification particulars on the Notice with the wrist bracelet or identification label attached to the body, as he was supposed to do so under the stipulated guidelines. He did not wear his reading glasses and could not read the details on the identification label attached to the body clearly. The mortuary attendant was also found to have failed to follow proper identification procedures, when the body was placed in the Viewing Room for identification by the family. Against the stipulated guidelines, he did not verify the identification particulars on the wrist bracelet together with the family before releasing the body. The HA, in accordance with its prevailing human resources policy, has issued a written warning to the mortuary attendant concerned who is also required to be retrained on the mortuary operation and procedures.

6. The investigation report is attached at the Annex for Members' reference.

Measures to Improve Mortuary Services in the HA

7. The HA has taken the opportunity to review the mortuary services in the HA and identify areas for improvement across the board. Proposed measures were endorsed by the HA Board at its meeting on 31 May 2007.

Enhancement programmes identified or currently underway include :

(a) enhancing the capacity of mortuaries in public hospitals;

(b) expediting the development of the Mortuary Information System to minimise the risk of erroneous body identification;

(c) further enhancing the procedures for body collection and identification;

(d) organising further training for mortuary staff; and

(e) encouraging the early collection of bodies from public hospital mortuaries by family members.

Details of the improvement measures are elaborated in the paragraphs below.

Enhancing the Capacity of Mortuaries in Public Hospitals

8. The HA has examined the need to enhance the capacity of mortuaries in all public hospitals by conducting a retrospective study of the mortuary utilization records. The HA records revealed that during the non-peak period from May to November 2006, only four out of the 31 HA mortuaries with 39 out of a total of 1,532 compartments (i.e. 2.5%) were shared. However, a snap shot stocktaking on one of the peak days in February 2006 revealed that 13 of the HA mortuaries had over 100% utilization with 215 cases (i.e. 14%) of sharing of compartments. The corresponding figures on a peak day in March 2007 were that 15 mortuaries had over 100% utilization with 291 cases (i.e. 19%) of sharing of compartments.

9. The demand for mortuary places is directly related to the number of deaths. According to information and projection from the Census and Statistics Department, the number of deaths in 2005 and the projected number of deaths in 2015 are 31,118 and 37,600 respectively (i.e. an increase of 21%). This will mean that an additional 320 mortuary compartments in the HA would be required.

10. The HA has initiated a mortuary expansion programme whereby 220 compartments will be added within the current financial year (i.e. 2007-08) and a further 330 compartments are planned for 2008-09. Upon completion, the total number of compartments will increase to about 2,080, representing an increase of about 36% from existing capacity. The HA will continue to

monitor the utilisation of its mortuaries and make adjustments to its expansion programme, if necessary.

11. As interim measures, families of deceased patients will be encouraged to consider intra-cluster transfer of bodies to mortuaries with spare compartments as well as arranging early collection of bodies for cremation. While the HA will endeavour to monitor more closely the utilization of mortuary compartments, sharing of one compartment by two bodies of the same sex over peak periods may still be inevitable before completion of the long term mortuary expansion programme.

<u>Expediting the Development of Mortuary Information System</u>

12. As reported in LC Paper No. CB(2) 1587/06-07(02), the HA is in the process of developing a Mortuary Information System to enhance the operating efficiency and control processes of public hospital mortuaries. In the first phase of the project, a bar-coding system will be put in place in all 31 public hospital mortuaries to facilitate the correct identification of the bodies of deceased patients. In the second phase of the project, a Mortuary Register System will be put in place to facilitate the tracking of deceased bodies in all public hospital mortuaries.

13. The HA has decided to expedite implementation of the new Mortuary Information System. The first phase of the project is now scheduled for immediate implementation, with PWH amongst the first batch of mortuaries to receive the new bar-coding system. The second phase of the project will follow closely, with an overall completion date by about mid-2008.

<u>Further Enhancing the Procedures for Body Collection and Identification</u>

14. The HA will implement a number measures to enhance further the procedures for body collection and identification with immediate effect in all public hospital mortuaries before installation of the new bar-coding system. These enhancement measures include –

(a) nursing staff in wards to verify both the identity card number and name on the identification tag and bracelet attached to the deceased body before sending the body to the mortuary;

(b) all handwritten and patient gum label identification tags and bracelets should contain both the Chinese (as available) and English names of the deceased patient;

(c) when identifying the body with family members in the Viewing Room, mortuary attendants are required to read out the identity card number and name on the identity bracelet attached to the deceased body and check them against the particulars recorded on the Memo for Identification and Collection of Body; and

(d) to check the identify card number and name of the deceased body one more time by a different staff (e.g. the mortuary supervisor) before the release of the body.

Training

15. The HA will organise a train-the-trainer course in July 2007 to reinforce the importance of staff vigilance, compliance with established procedures, clear documentation, and proper use of signage on shared storage compartments.

Encouraging the early collection of bodies

16. The average length of storage in public hospital mortuaries has increased notably from three to 11 days in 2002 to 15 to 20 days in 2006. This prolonged length of storage, partly attributable to selection of cremation dates by families of the deceased patients, is one of the contributing factors for the high occupancy rates at public hospital mortuaries and hence the need for bodies to share compartments. The Government, including the Food and Environmental Hygiene Department, and the HA are exploring means to increase body cremation capacity with a view to shortening the waiting time for cremation.

17. It is also worth noting that the average length of storage at the mortuaries in Bradbury Hospice and Hong Kong Buddhist Hospital, which are the only two public hospitals that impose storage charge for deceased bodies due to historical reasons, is much shorter than the average length of storage in other public hospital mortuaries. If the mortuary capacity remains tight despite implementation of all improvement measures, consideration may have to be given to introducing storage charges in public hospital mortuaries for storage exceeding a reasonable length of period which apparently shows to be an effective means for encouraging the early collection of bodies by their families.

Advice Sought

18. Members are invited to note the content of this paper.

Hospital Authority
Health, Welfare and Food Bureau
June 2007

INVESTIGATION REPORT ON THE MIX-UP OF TWO BODIES AT THE MORTUARY OF PRINCE OF WALES HOSPITAL, SHATIN, N.T.

Date: 5 May 2007

INVESTIGATION PANEL:

Chairman: Dr. Siu Fai LUI, Service Director, Risk Management & Quality Assurance, New Territories East Cluster,

Members:

Dr NG Wing Fung,
Co-chairman, Central Coordinating Committee, Pathology, Hospital Authority, and Chief of Service, Department of Pathology, Tseung Kwan O Hospital

Dr. Michael Wang Ming SUEN
Cluster Coordinator, Pathology, New Territories East Cluster

Ms. Lucia LI
Cluster General Manager (Administrative Services), New Territories East Cluster

TERMS OF REFERENCE:

1. To investigate the incident.

2. To review the current procedures on the identification and release of dead bodies in order to prevent recurrence of similar incident and to identify areas for improvements.

CONTENTS

1. Sequence of events

2. Findings

3. Conclusion

4. Recommendations

1. SEQUENCE OF EVENTS

1.1 On 10 March 2007, the body of the late Patient A was received at the mortuary of the Prince of Wales Hospital from a medical ward and was stored in Compartment 27 where the body of Patient C was placed earlier. The body of Patient A was placed next to the body of Patient C. The body of Patient A had an identification wrist bracelet and two body Identification Labels (form no. HA234) with personal identification details (prepared by ward staff). Upon arrival at the mortuary, the name, identity document (ID) number of Patient A and the compartment number were entered in the Hospital Mortuary Register (form no. HA1568). Two blue identification name cards with the Chinese name and ID number of Patient A were created by mortuary staff and were placed in the card holder on the door of Compartment 27 and on the rail of the tray. The body of Patient C was taken away on 15 March 2007.

1.2 On 23 March 2007, the body of the Patient B was moved from a medical ward to the mortuary. It was stored in Compartment 27, sharing the same compartment with Patient A. Two blue identification name cards with the name and ID number of Patient B were created and were placed in the card holder on the door of Compartment 27 and on the rail of the tray.

1.3 On 29 March 2007, the wife of Patient A arrived to collect her husband's body. According to the Hospital Mortuary Register (form no. HA1568), the body was stored in Compartment 27. Mortuary Attendant X collected a body from Compartment 27. He went through an identification process and thought that he had ascertained the identity of the body as that of Patient A. The body was moved to the Viewing Room for identification by the family. The wife of Patient A positively identified that the body was that of her husband. The body was then released to the wife of Patient A.

1.4 On 11 April 2007, the staff of a funeral parlor arrived at the mortuary to collect the body of Patient B. According to the Hospital Mortuary Register (form no. HA1568), the body was stored in Compartment 27. However, the mortuary staff could not find the body of Patient B in Compartment 27 or any

other compartment. The body of Patient A was found in Compartment 27. It was likely that the body of Patient B had been erroneously released to the family of Patient A. The family of Patient B was immediately informed of the error when they arrived at the mortuary.

1.5 The Collection of Remains Notice (form no. PWH217) of Patient A was reviewed. The Identification Label (form no. HA234) of Patient B and the blue identification name card of Patient A were found being stapled together with the Collection of Remains Notice (form no. PWH217) of Patient A, thus it was almost certain that the body of Patient B might have been wrongly released to the wife of Patient A on 29 March 2007.

1.6 When the wife of Patient A was contacted by phone on the mix-up of the two bodies, she was adamant that she had positively identified her late husband on 29 March 2007. She eventually agreed to be accompanied to the hospital to view the body in Compartment 27 which had the wrist bracelet and Identification Label (form no. HA234) of Patient A. Despite careful viewing, she could not be certain that the body was that of her late husband. The Police was requested to conduct finger print study to confirm the identity of the body in Compartment 27.

1.7 The wife of Patient A released the ashes of the presumed Patient B to the Food and Environmental Hygiene Department on 13 April 2007. The ashes were subsequently collected by the family of Patient B.

1.8 On 16 April 2007, the Policy confirmed by finger print study that the identity of the body in Compartment 27 was indeed Patient A. The body of Patient A was then collected by his wife.

2. FINDINGS

Mortuary Attendant X admitted committing errors in the process of collecting the body from the storage compartment and releasing the body. The body of Patient B was released to the family of Patient A.

2.1 The following errors were committed:

2.1.1 He did not take the Collection of Remains Notice (form no. PWH217) for Patient A to the body storage area for body identification.

2.1.2 He had wrongly assumed that the two blue identification name cards which indicated only the location of storage compartment for bodies, served to indicate the position of bodies inside the compartment.

2.1.3 He did not comply with the guidelines to ascertain the identity of the body when collecting the body from Compartment 27. On that particular occasion, he did not take his reading glasses with him. He checked the information on the Identification Label (form no. HA234) without the reading glasses and perceived that the English name looked alike (the last English name was the same for both Patients A and B). He did not fully verify the identification of the body.

[The Investigation Panel requested Mortuary Attendant X to read the name (letters) and the ID number of an Identification Label (form no. HA234) without his reading glasses. He was unable to read the letters or ID number correctly.]

2.1.4 He did not comply with the guidelines to check the identification from the wrist bracelet with the family / representatives before releasing the body. It was uncertain what steps he had taken at the time to check the identification of the body. He had not personally verified the information on the wrist bracelet (name and ID number) with the wife of Patient A.

2.2 Contributing factors:

2.2.1 Two bodies sharing the same compartment

Because of the prolonged stay of bodies at the mortuary (on average 15-17 days), the mortuary at PWH is always full. The average occupancy rate was 138%-152% during the first three months of 2007. Hence, it was necessary to place two bodies in one compartment.

The sharing of a compartment could be a contributing factor in the mix up of bodies, albeit strict and careful verification carried out according to the stipulated guidelines would have correctly identified each body.

2.2.2 Similar appearance of the two bodies

Apparently the Patient A and Patient B were of similar facial appearance and some post-mortem changes could have taken place. Hence, unfortunately the wife of Patient A had mistakenly identified the body of patient B as that of her husband.

> *[According to the staff from the funeral parlor, there was a 80-90% resemblance of the facial features of Patient B with the photo of Patient A.]*

2.2.3 Implementation of the revised guidelines issued by Hospital Authority in March 2006 after the Fu Shan incident at the Mortuary of Prince of Wales Hospital

2.2.3.1 In March 2006, the Mortuary Officer at PWH had briefed his staff on the revised guidelines issued by the Hospital Authority. The new guidelines were posted on the notice board.

2.2.3.2 The Mortuary Unit had introduced additional measures including: (a) placing a blue identification name card of the body on the compartment door and on the rail of the tray to assist in locating the bodies, (b) keeping the Identification Label (form no. HA234) and the blue identification name card with the Collection of Remains Notice (form no. PWH217) for record.

2.2.3.3 In March 2006, the Cluster Chief Executive of NTEC had instructed the Cluster Coordinator of Pathology to visit all the mortuaries in NTEC to review the existing practice and to remind all mortuary staff to comply with the revised guidelines.

2.2.3.4 In October 2006, the Mortuary Unit was assessed by the Group Internal Audit (GIA) of the Hospital Authority.

2.3 Observations of the Investigating Panel

Although the above measures were introduced, the investigation panel has the following observations:

2.3.1 Components of the guidelines were not stringently enforced nor consistently complied with on all occasions,

eg taking the Collection of Remains Notice (form no. PWH217) to the storage room for identification of the body, ie checking the information on the wrist bracelet with the family and consistently checking the ID number on all occasions.

> *[According to the Procedures on Body Collection and Identification, mortuary staff is to bring along the Collection of Remains Notice (form no. PWH217) to the storage room. The particulars stated in the Collection of Remains Notice (form no. PWH217) will be checked against the Identification Label / wrist bracelet of the deceased. Before releasing the body to the family, the Mortuary staff together with relatives / authorized representatives will check the particulars on the Identification Label / wrist bracelet of the deceased against the details on the Collection of Remains Notice.*

2.3.2 The blue identification name card placed on the compartment door was introduced by the Mortuary Unit to assist in locating the bodies. There were no established guidelines or understanding regarding the relation between the position of the blue identification name cards on the compartment door and the position of the bodies inside the compartment. This could cause misunderstanding and error in locating the bodies in a compartment.

2.3.3 There was insufficient monitoring to see that staff strictly complied with the guidelines for correct identification of body.

3: CONCLUSION

3.1 It is the opinion of the Investigation Panel that Mortuary Attendant X is responsible for the error of releasing the body of the late Patient B to the family of the late Patient A. The main reason is that he had not complied with the guidelines for the identification and release of body.

3.2 There are contributing factors for the incident including (a) overcrowding of the mortuary leading to double occupancy of a compartment, (b) some difficulty and an unfortunate error on the part of the relative in identifying the body of Patient A, and (c) although the revised guidelines were promulgated and additional measures were introduced by the Mortuary Unit at PWH, components of the guidelines were not stringently enforced nor consistently complied with on all occasions.

4. RECOMMENDATIONS

1. Clear and explicit instruction of the identification process -- the ID number and full name (Chinese and English) are the two identifiers which must be adopted on all occasions.

2. Clear documentation of the ward and mortuary procedures in the body identification process through the use of standardized forms. A final counterchecking process by another staff member should be conducted immediately before releasing the body to avoid human error. A copy of the proposed standard form for documentation of procedures is at Appendix.

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3. Blue identification name cards which indicate the location of storage compartments for bodies should not be used as indicator of the position of bodies inside storage compartments.

4. To strengthen the training and supervision of mortuary staff and to ensure that mortuary staff fully comply with the guidelines on identification of body on all occasions through continuous reminding and random auditing.

5. Introduction of barcode scanning technology to make sure that the ID number on the identification wrist bracelet matches the ID number on the Collection of Remains Notice (form no. PWH217) issued to the relative for collecting the body.

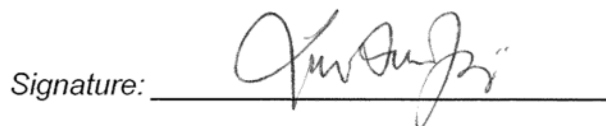
6. Publicising the need for and if possible, ensuring early collection of the bodies by the relatives. Shortening cremation waiting time is essential for early collection.

7. Appropriate increase of the mortuary capacity.

This report is prepared and endorsed by members of the Investigation Panel.

Date: 5 May 2007.

Chairman: Dr. Siu Fai LUI, Service Director, Risk Management & Quality Assurance, New Territories East Cluster,



Signature: ______________________

Members:

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Signature: ______________________

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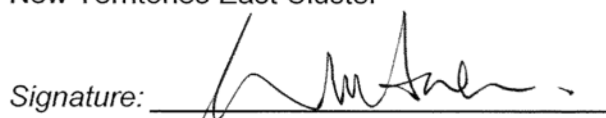

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Ms. Lucia Li
Cluster General Manager (Administrative Services),
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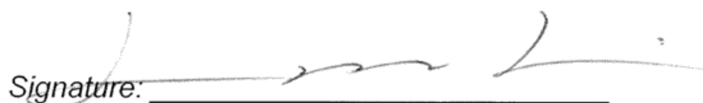

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Standard Form for Identification of Deceased bodies

Name: ID number:
Sex: DOB: Age:
Diagnosis: Body category status :

1. Nurse performed the last office
Staff name: ____________________
Signature: ____________________
Date: ____________ Time: ________

Second staff (if involved):
Staff name: ____________________
Signature: ____________________

Name:

ID:

(from wrist band)

2. Collection of the body from ward
Staff name: ____________ Signature: ____________
Date: ____________ Time: ________

3. Body arrival at mortuary
Staff name: ____________
Signature: ____________
Date: ____________ Time: ________
Compartment no: __________

Name:
ID:

(from wrist band / Identification label*)

4a. Release of body to family
Date: ____________ Time: ____
Compartment no: __________

Name: ____________ ____________
ID: ____________ ____________
(from wrist band / Identification label*) (from Memo for I&C of body)

4b. Verification of body with family
Staff Name: ____________
Signature: ______________

ID number [ ]
Name: [ ]
(on Bracelet, Memo for I&D, ID card)

4c. Relative (confirm identification is correct)
Name: ________________________ Signature: ___________
ID# _______________

5. Mortuary senior staff / other staff (confirm documentation)
Name: ____________________________ Signature: _______________
Date: ____________________________ Time: _____________________

** Preferably to use wrist bracelet, if not accessible, to use Identification label*