

# St George's University Hospitals



NHS Foundation Trust

11th May 2016

St George's University Hospitals  
NHS Foundation Trust  
Blackshaw Road  
London  
SW17 0QT  
Tel: 020 8725 4555

Ms Angela Hodes  
Assistant Coroner for Inner West London  
Westminster Coroners Court  
65 Horseferry Road  
London  
SW1P 2ED

Dear Ms Hodes

I am writing in response to the Regulation 28 report that you issued to St. George's University Hospitals NHS Foundation Trust on 17/03/2016 regarding the death of Mrs. Jacqueline Scott.

In relation to the matters of concern you raised the following points:

- 1) The Philips Respironics Trilogy 202 (BIPAP)
  - i) The BIPAP Trilogy 202 machine had a subtle visual display symbol which denoted when the machine was running on battery power. That symbol is not visible if there are many alert alarms as the alarm messages fill up the screen as they come in pushing the earlier alerts (low battery) off the screen.
  - ii) The BIPAP Trilogy 202 Machine has the same alarm sound for battery depletion as for circuit disconnect (where for example the face mask slipped) which was the more usual and expected reason for an alarm and these two factors separately and together did not have any feature of urgent warning to alert staff to battery depletion.
- 2) Staff Training
  - iii) Staff who were experienced and trained on the BIPAP machine did not appear to be trained to be alert to the situation or to the significance of a battery symbol showing on the machine when the machine was plugged in to the mains or to any particular alarm which denoted battery depletion rather than mask slippage.
- 3) The provision of power to the ward
  - iv) Richmond ward ADU beds was designated as a category 4 area which in this case meant there was no isolated power supply (IPS) provided to the ward notwithstanding life-saving equipment was routinely used.
  - v) Hospital Technical Memoranda (HTM) 06-01 Part A provides advice and guidance and benchmarking standards for electrical installation, maintenance and safety etc in healthcare premises. It is a matter of concern that there is a

conflict of advice between clause 4.22 and Clause 6.62. Clause 4.22 states: “clinical treatment and patient safety may be compromised (but not endangered) by any interruption of electrical supply” whereas clause 6.62 states: “In clinical risk Category 4 and 5 areas the patient environment should have at least two IPS circuits at the bedhead”

- vi) There was no system or check that would alert ward staff to the failure of mains power in any particular area.
- 4) Notification to estates management
  - vii) The crash bell for bed 5 did not work when the emergency arose. However estates management had been notified some days earlier of the broken patient call in the same bay. This was of concern as both emergency bells were on the same circuit and not fixed until 2 April 2014 when by chance the failure of electricity was identified.

In response to these concerns for ease I will address each of these points individually.

#### Point 1 - The Philips Respironics Trilogy 202 (BIPAP)

Ms Louise Best has provided a written response on behalf of Phillips on the 12<sup>th</sup> April 2016.

#### Point 2 – Staff Training

During the Serious Incident investigation, the panel reviewed the training for nursing staff provided for non-invasive ventilation (NIV) and the particular medical device (Trilogy ventilator). They found that training was overseen by a nurse consultant and a clinical nurse specialist in respiratory medicine. There were appropriate clinical competencies developed as part of the Trust's NIV policy. The nurses had undergone either formal (e.g. classroom based) training or informal on the job training by the specialist nurses, practice educators and senior staff on the respective ward and in ED.

The panel was satisfied during the investigation that all nursing staff involved in the care of Mrs Scott were appropriately trained on the particular machine and NIV therapy. There was also access to senior help and a practice educator was available on the day when the incident happened. The nurse directly involved in the incident was a trained ITU nurse of six years, who had additional training on the NIV and the Trilogy machine. The panel found, however, that there was no consistent documentary evidence of the training that staff had received.

The panel therefore concluded that staff training was appropriate in this case, but recommended an action in the SI report to complete a training needs analysis to establish the exact number of other staff that had been trained and to improve documentation of this training.

Following this incident staff working in this area have undergone a period of retraining by Phillips which includes the points raised in point 1. These key aspects of training have further been incorporated into the training delivered by the practice educator and specialist nurses. The unit has further employed a dedicated practice educator to work with staff in ADU. All staff other than two new starts have now received training on NIV and this device and competencies are held within the department.

#### Point 3 - The provision of power to the ward

The Trust engaged an external expert to advise the organisation on the areas where the electrical infrastructure requires upgrading to comply with HTM 06-01. This advice has



formed the basis of the design of a UPS/ IPS back up system in the Richmond ADU area. The work has now been put to a tender process with the summer 2016 set as the date for completion of this work due to the co-ordination that is required with clinical areas for this work to be completed. The Trust has set aside sufficient funds for this work to be completed and once installed the designed UPS/IPS back up system will alert staff of any failure in the electricity supply to the mains sockets.

I would be happy to update you on the progress of this work following the tendering process and on completion of the installation.

Point 4 - Notification to estates management

Call bell repairs are part of the top priority (Priority 1) schedule. Calls rated at Top priority are attended within 3 hours of the call being logged. Timely Response to Priority1 calls forms part of the Key Performance Indicators for the Estates department. The electrical circuits in the Richmond ADU area are to be upgraded in line with the response under section 5 part 3 of the section 28 notice. Therefore the installation of the UPS/IPS system following the tendering process will ensure that this requirement is met.

Additionally following this incident the nursing staff within this area undertake checks of emergency call bell systems twice weekly to ensure they are operational. This is recorded on department checking sheets which are held locally and any faults reported to estates.

I hope that the above actions address your concerns and provide reassurance that the Trust is fully committed to providing our patients with the highest level of care and to this end we are continually seeking to improve patient safety.

If you require clarification on any of the above actions, I would be very happy to respond further.

Yours sincerely,



**Jennie Hall**  
**Chief Nurse and Director of Infection Prevention and Control**