MISS N PERSAUD
HER MAJESTY'S CORONER
EAST LONDON
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Telephone 020 8496 5000 Email [redacted]

REGULATION 28: REPORT TO PREVENT FUTURE DEATHS (1)

Ref: [redacted]

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. [redacted], Head of Quality and Policy, Royal College of Emergency Medicine, 7-9 Bream's Buildings, Chancery Lane, London, EC4A 1DT** **Email: [redacted]**
1	**CORONER** I am Nadia Persaud area coroner for the coroner area of East London
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013. http://www.legislation.gov.uk/ukpga/2009/25/schedule/5/paragraph/7 http://www.legislation.gov.uk/uksi/2013/1629/part/7/made
3	**INVESTIGATION and INQUEST** On the 7th November 2019 I commenced an investigation into the death of Mr Paul Sartori 38 years old. The investigation concluded at the end of the inquest on 22nd April 2021. The conclusion of the inquest was a narrative conclusion: *Paul Sartori died from a dissecting aortic aneurysm on the 27 October 2019. He sought emergency medical assistance for central chest pain on the 24 October 2019. He was taken by ambulance to A&E, but directed away from the A&E department, to the urgent care centre by an emergency department nurse. He underwent an assessment by a general practitioner in the urgent care centre. The general practitioner formed the impression of costochondritis (musculoskeletal chest pain). Mr Sartori was advised to take analgesia and to seek medical advice if pain did not improve or if symptoms worsened. Mr Sartori suffered increasing chest pain on the 27 October 2019. An*

	ambulance attended, but sadly, Mr Sartori did not respond to resuscitation efforts. No specific investigations were undertaken to rule out potentially lethal causes of the acute chest pain when Mr Sartori presented to A&E on the 24 October 2019. Had bilateral blood pressures and a CT scan been carried out on the 24 October 2019, it is likely that Mr Sartori's death would have been avoided.
4.	**CIRCUMSTANCES OF THE DEATH** As can be seen from the narrative conclusion, Paul Sartori sought emergency medical assistance for central chest pain on the 24th October 2019. The previous day he had begun to suffer from arm pain. On the morning of the 24th October 2019 he reported to the emergency operator that he had been suffering from clamminess and sweating, followed by numbness in his hand. On attendance of the paramedics at 0630, he had a pain score of 7 out of 10 and a raised heart rate of 107 and 108. The pain score reduced at 06:50 to 4 out of 10. The paramedics determined that he should be taken to A & E to investigate the cause of the chest pain. Mr Sartori was taken to A & E where an A & E nurse took an incomplete set of observations and redirected Mr Sartori to the urgent care centre. There is no record of the A&E nurse's assessment. In the urgent care centre, Mr Sartori was assessed by a GP who made a diagnosis of costochondritis. Mr Sartori left the hospital without any further investigation or treatment. He continued to suffer from pain which became acutely worse on the morning of the 27th October 2019. At this time an ambulance was called but he was found to be unresponsive in his home address. Resuscitation efforts were provided but he was pronounced life extinct in his address on the 27th October 2019. A post-mortem examination found that Mr Sartori had suffered a ruptured dissecting aortic aneurysm of the ascending thoracic aorta.
5	**<u>CORONER'S CONCERNS</u>** During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths could occur unless action is taken. In the circumstances it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows. – Evidence was heard at the Inquest from an independent cardio thoracic surgeon. During the course of his evidence he stated that in his professional experience, far too many doctors are missing the diagnosis of thoracic aortic dissection. The expert confirmed that the tools to make the diagnosis are readily available in A & E departments. He considered that what is required is a full history and clinical assessment, to include bilateral radial pulses and bilateral blood pressures. If there is a differential between the bilateral pulses and bilateral blood pressures, then a CT scan should be carried out to rule out an aortic dissection. The expert confirmed that misdiagnosis of aortic dissection is a very common problem. During the course of the Inquest, information was also provided by the organisation "THINK AORTA". They stated that: *Our experience is that misdiagnosis of acute aortic dissection is a systemic issue in the NHS which currently leads to many unnecessary deaths. Three main factors underpin the problem of misdiagnosis:* *i. Lack of awareness and education*

	ii. Access to CT scanning *iii. Transfers to specialist centres* The THINK AORTA campaign confirmed that those units that have successfully implemented THINK AORTA to prevent misdiagnosis typically do more than just display the THINK AORTA posters. They embed THINK AORTA in their education and practice by running education sessions two or three times a year and actively questioning patients with chest pain. Correspondence was also presented at the Inquest from the Aortic Dissection Charitable Trust. They also highlighted that in half of patients presenting with acute aortic dissection, the diagnosis is not considered and about a third of patients are actively treated for the wrong diagnosis. They estimated that in the UK around 500 patients each year die from acute type A aortic dissection, due to a delayed diagnosis or failure to make the diagnosis. They have questioned whether current decision making tools and risk scoring tools are sensitive enough to: i. Reliably diagnose or exclude aortic dissection ii. They confirm their view that education about acute aortic dissection should include all clinicians in the patients' pathway from first responders to radiologists and they highlight areas that education should focus upon. The above evidence raised systemic concerns about awareness of aortic dissection in emergency departments and about whether current guidance and risk scoring tools require review and revision to address the widespread misdiagnosis of thoracic aortic dissection.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you and your organisation have the power to take such action.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by **23 June 2021** I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.
8	**COPIES and PUBLICATION** I have sent a copy of my report to the Chief Coroner and to the family of the deceased (parents and partner), to the Trusts concerned in this case and to the CQC. I will also send a copy of the report to the Director of Public Health who may find it useful or of interest. I am also under a duty to send a copy of your response to the Chief Coroner and all interested persons who in my opinion should receive it. I may also send a copy of your response to any other person who I believe may find it useful or of interest. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response.

9	**28th April 2021** **[SIGNED BY CORONER]**